

VOLVO BM

4300



VOLVO BM 4300

THE ECONOMICAL WAY TO ACHIEVE

CAPACITY WITH VERSATILITY

The new Volvo BM 4300 is a highly efficient allround loader. Its size makes it economical at most jobs. It weighs 8.5 tonnes (18 800 lb) and has an 82.5 kW (112 hp) SAE turbocharged engine. Power is transmitted through a 4-speed, in-line power shift gearbox that permits smooth selection and quick acceleration. The Volvo BM 4300 is already well established, and with its new, more powerful engine, you get a machine with higher performance at no extra cost. A characteristic of the 4300 is the well-balanced interplay of all functions — engine output, tractive power, hydraulics and loader unit geometry. Moreover, the rugged attachment bracket permits quick and easy attachment changes. All these features combine to give a production capacity that makes the Volvo BM 4300 one of the most efficient loaders in its class. Equally as good for bucket loading as it is for materials and timber handling.





COMFORT AND SAFETY

Conveniently located controls and instruments.

Easy-to-remove roof hatch.

Curved windscreen.

Adjustable vents.

Effective working lights (halogen).

Cab frame of heavy steel sections.

Large, well-positioned rear-view mirrors.

Large glazed areas.

Safe boarding handrails.

Windscreen wipers, front and rear.

Effective heating and ventilation system with large air filters.

Operator's seat with multiple adjustments.

Foot-operated differential lock.

Fuses and relays well arranged and protected.

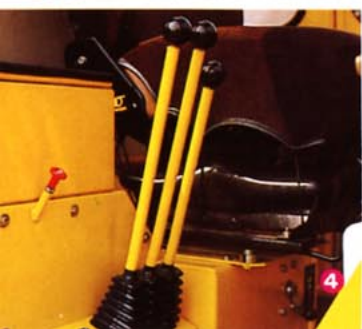
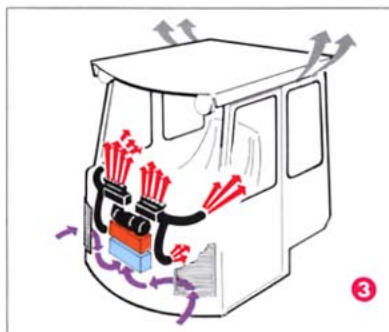
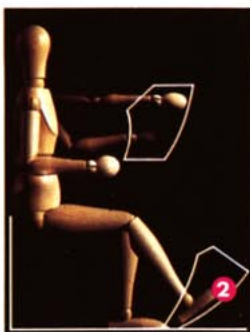
Mounted on rubber pads.

Flat floor.

Power-assisted brakes.

Conveniently located grab bars.

Precise steering.



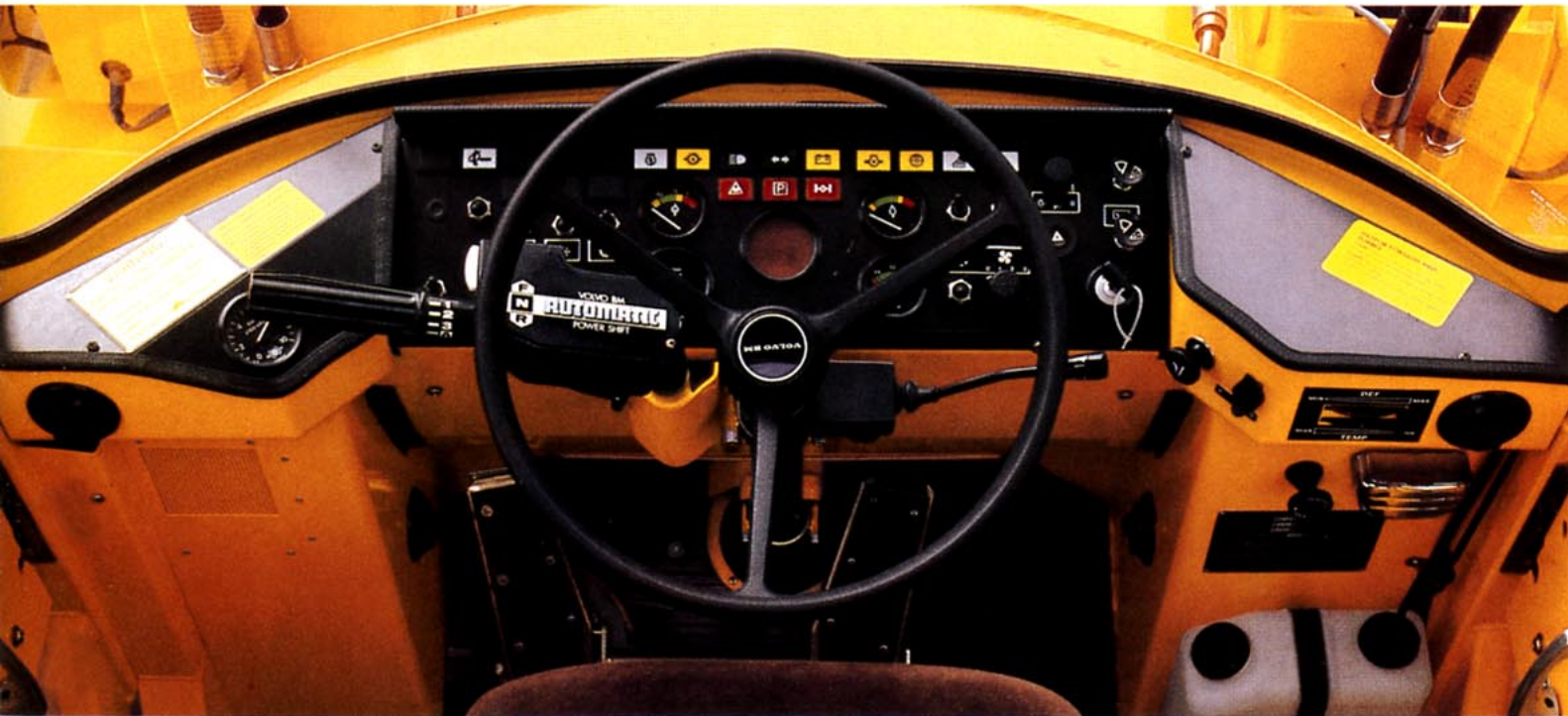


An operator in the Volvo BM 4300 works in comfort and safety. Seat, levers, controls and instruments have been meticulously tested and positioned to provide the operation with the most efficient and comfortable working environment. The cab is ROPS-proved and very strong, with a frame of heavy steel sections.

The instrument panel provides at-a-glance information on all functions, with instruments and warning lights all marked with easily recognizable symbols.

Tough, realistic tests

In addition to laboratory tests, Volvo BM machines are subjected to tough practical trials. One test involves rolling a machine down an embankment to prove that it can withstand harsh punishment without suffering more than superficial damage.

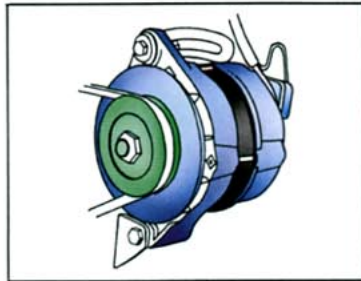
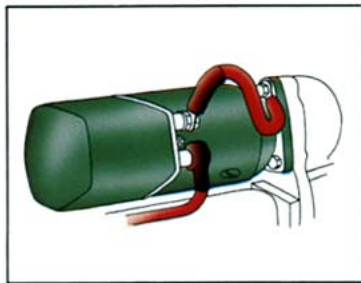
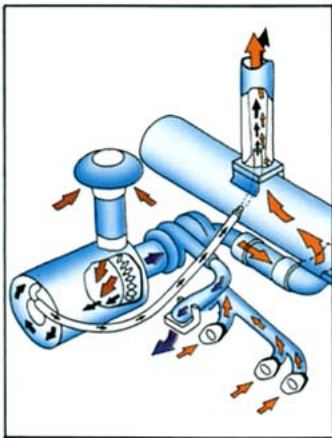


- 1 Comfortable seat with wide range of adjustments.
- 2 Controls and pedals conveniently located for optimum operator efficiency
- 3 Effective heating and ventilation
- 4 Well-matched powerful hydraulics with three functions
- 5 Foot-operated differential lock
- 6 Large, easily replaceable air filters
- 7 Non-slip boarding steps and good-sized handrails

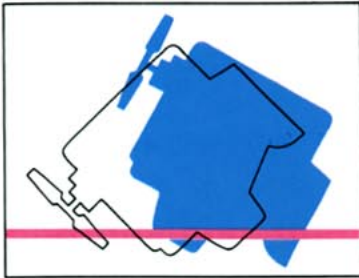
VOLVO BM AUTOMATIC POWER-SHIFT



The Volvo BM 4300 is available with automatic shift. A specially programmed computer handles gear selections to make sure that the machine operates in the correct gear in all situations. Result: higher capacity, improved fuel economy.



- ① Excellent air cleaning. Cyclone cleaner with automatic ejector discharge, main filter and catch-all filter.
- ② The oil sump is designed to maintain adequate lubrication even on steep grades: 30° forward and 45° backward.
- ③ The 3 kW (4 hp) starter motor gives plenty of starting power.
- ④ The 1260 W alternator guarantees effective charging.
- ⑤ Large, low-speed fan.



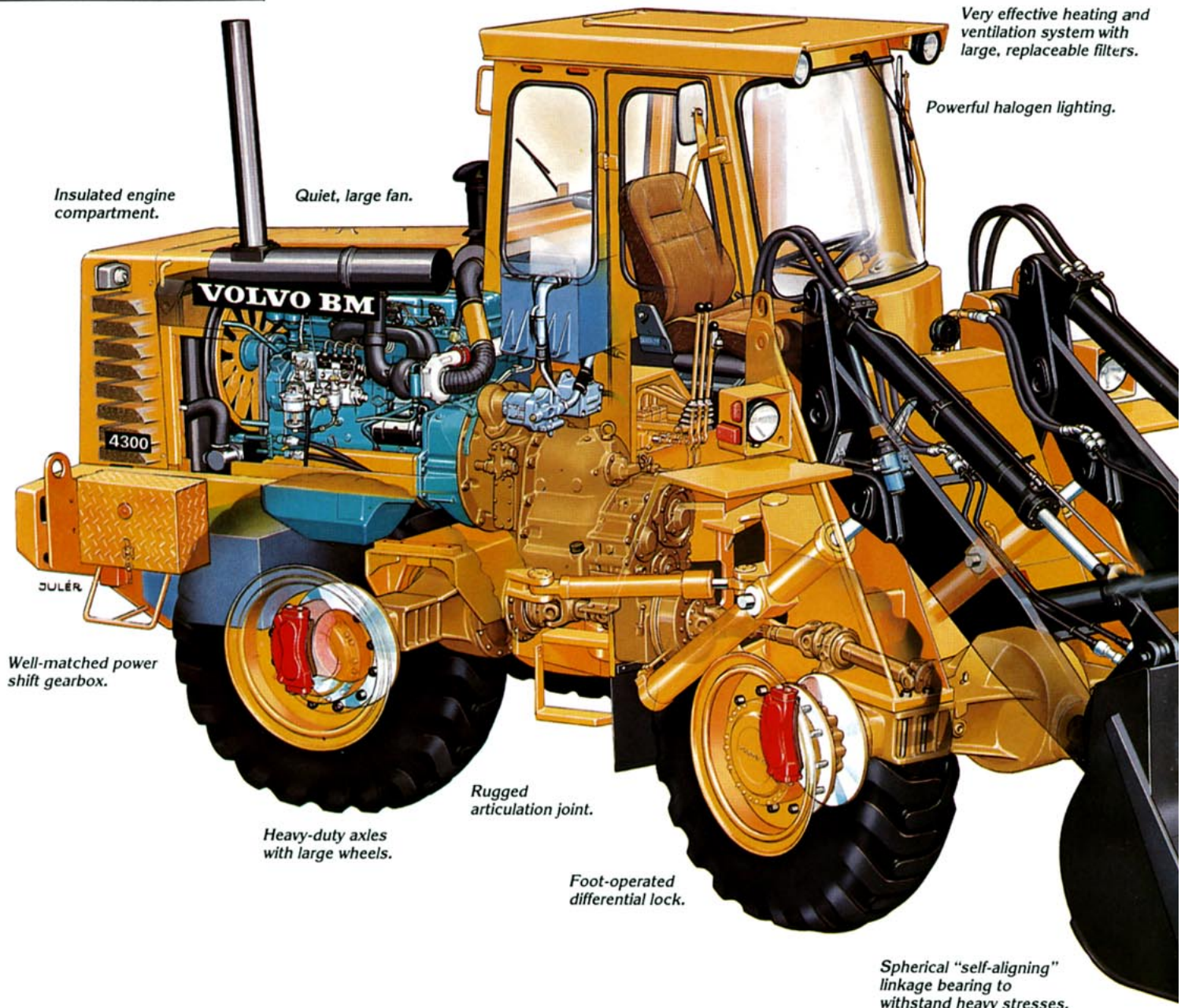
ROPS-tested safety cab.

Very effective heating and ventilation system with large, replaceable filters.

Powerful halogen lighting.

Insulated engine compartment.

Quiet, large fan.



Well-matched power shift gearbox.

Heavy-duty axes with large wheels.

Rugged articulation joint.

Foot-operated differential lock.

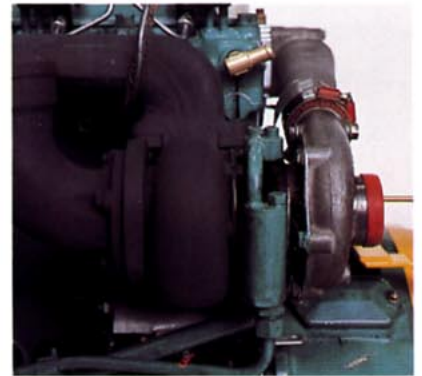
Spherical "self-aligning" linkage bearing to withstand heavy stresses.

MIGHTY POWER PACK



Volvo BM turbodiesel and Power Shift transmission give good economy

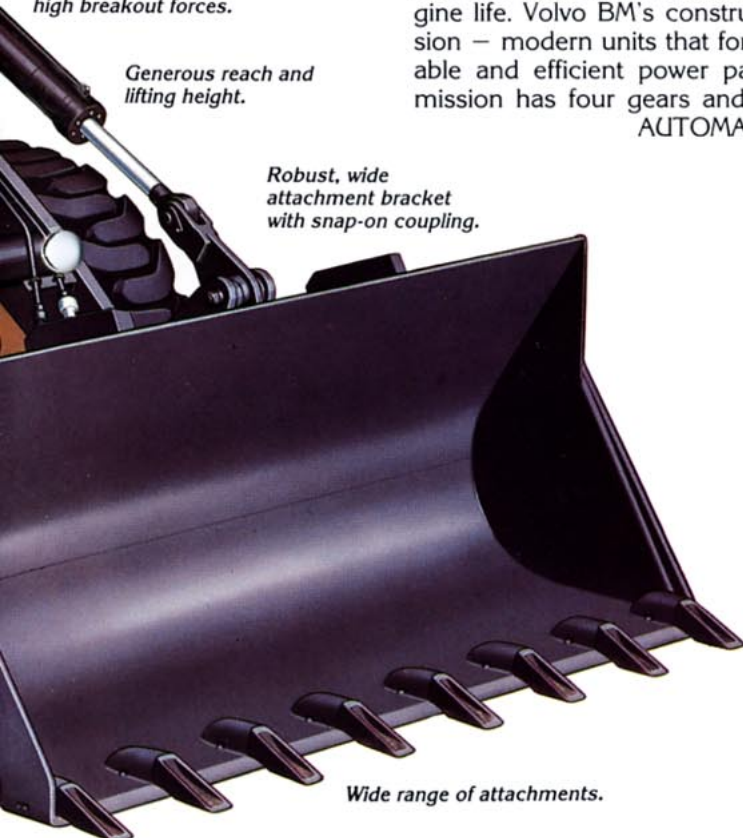
The Volvo BM 4-cylinder TD 45 turbocharged diesel engine is powerful and economical. It has characteristically high torque, which gives the 4300 the power for fast, efficient work cycles. A turbocompressor provides the additional air for improved combustion, cleaner exhaust gases and improved fuel economy. The engine develops 82.5 kW (112 hp) SAE. With its 24 volt electrical system and an induction coil to heat the intake air, the engine is very easy to start in cold weather. A large air cleaner with automatic discharge, plus an efficient cooling system to maintain accurate temperature control, ensures long engine life. Volvo BM's construction engine and transmission – modern units that form a very well-matched, reliable and efficient power pack. The power shift transmission has four gears and is available with Volvo BM AUTOMATIC POWER SHIFT for even greater machine capacity.



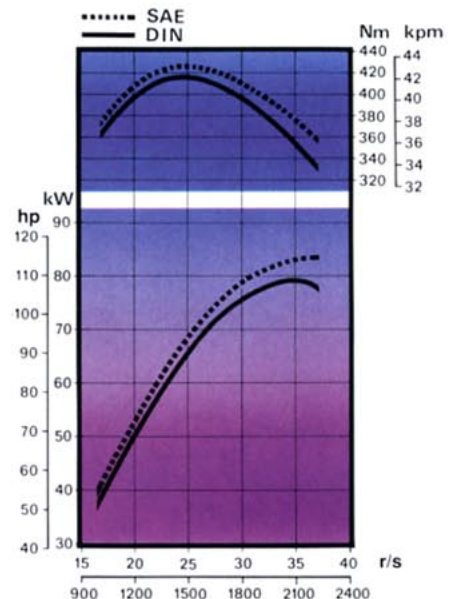
The loader unit on the new generation of Volvo BM loaders gives good bucket angles, good parallel side-arm action and high breakout forces.

Generous reach and lifting height.

Robust, wide attachment bracket with snap-on coupling.



Wide range of attachments.



A characteristic of the TD 45 engine is a flat torque curve over a wide range of rpms, delivering ample power even at low revolutions.

SUPERB SIDE-ARM SYSTEM



Good carrying angle — no unnecessary spillage, even during forced loading. Full bucket every time.



The dumping angle, together with the mechanical kick-out, enables the bucket to clear itself of even "sticky" material.

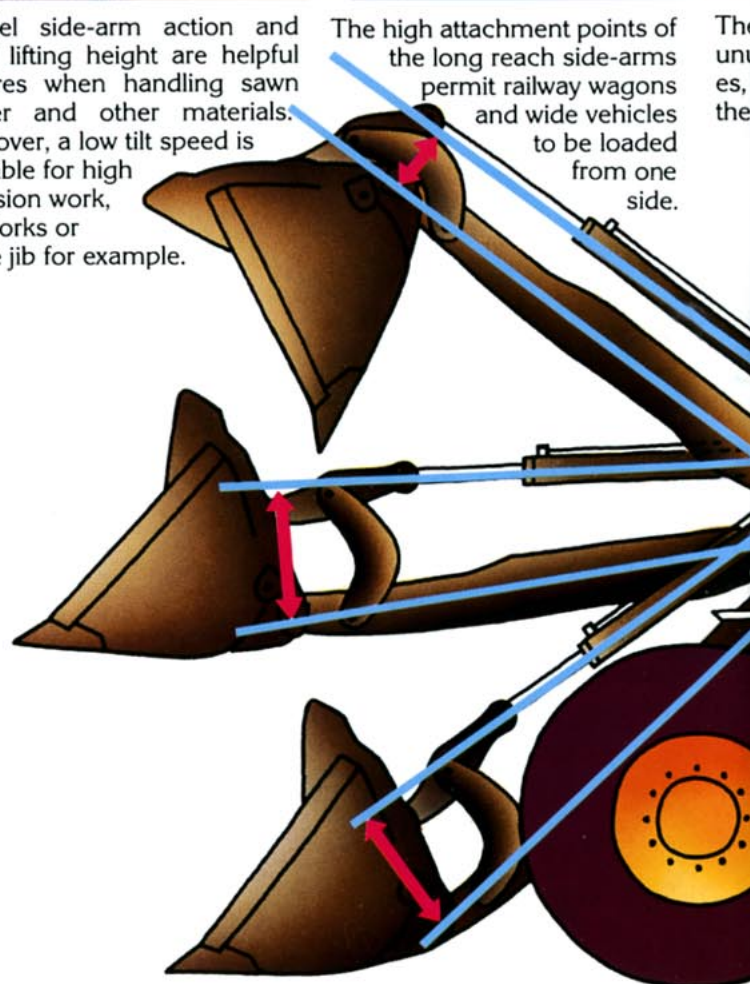
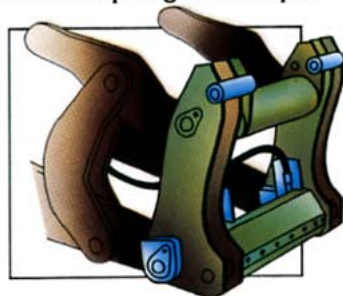


Parallel side-arm action and good lifting height are helpful features when handling sawn timber and other materials. Moreover, a low tilt speed is available for high precision work, with forks or crane jib for example.



The high attachment points of the long reach side-arms permit railway wagons and wide vehicles to be loaded from one side.

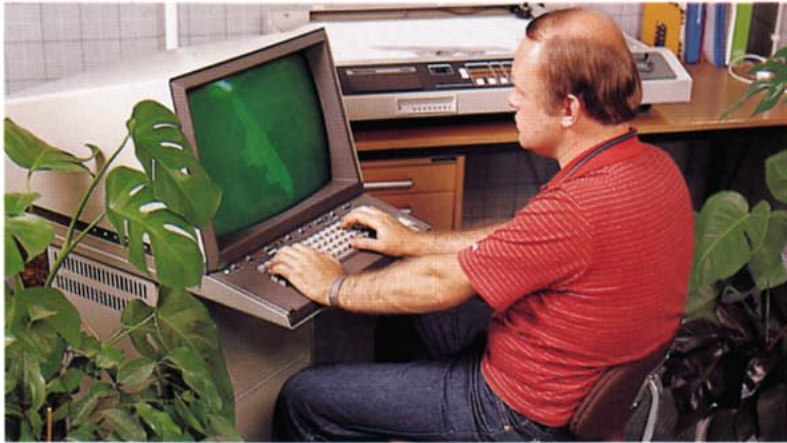
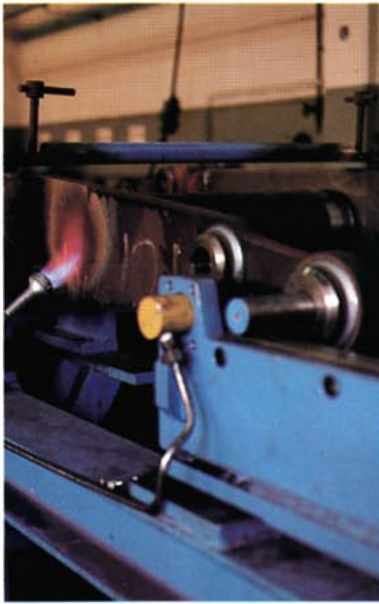
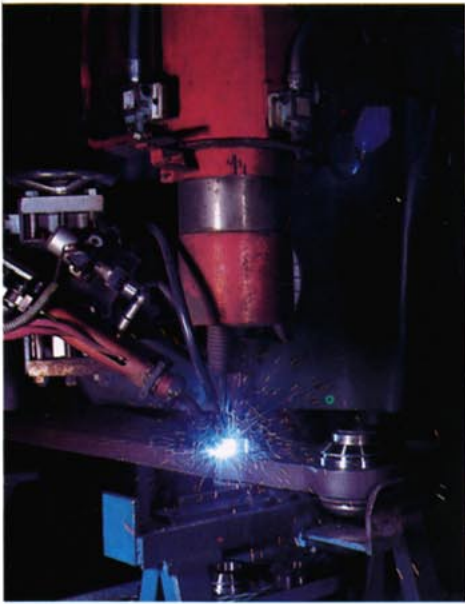
The 4300 has a ruggedly built loader unit that is made of high-grade material. The loader unit has a wide mounting to the torsionally rigid front frame section. The tilt linkage system has spherical bearings at all high-stress points. All other pivot points incorporate heavy-duty bushings made from special alloys. All bearings are sealed for extra long life and long lubrication intervals. Reach and lifting height are generous, making it easy to manoeuvre the load. The loader unit's linkage system gives the 4300 very good tilt and dump angles for rapid bucket filling, good carrying capacity without spillage and effective dumping. The Volvo BM 4300 is a very fast worker. The hydraulics are ideally matched to the strength of the machine for long and efficient performance.





linkage system provides usually good breakout force even with the loader unit at top position.





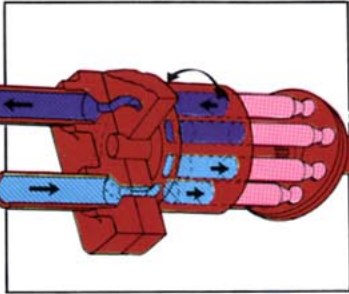
QUALITY

Sophisticated computer technology is used on a large scale in the development work. By programming in the demands placed upon a side-arm system in work and then letting the computer compare the results of different side-arm geometries with these demands, we have been able to assemble information that would be impossible to obtain by conventional methods. With the help of the computer, we have also been able to ascertain the operator's visibility through the different alternative side-arm systems. The computer provides a unique opportunity to view the final result of an idea without having to build models or prototypes. Genuine Volvo BM quality is then built into the machine by means of advanced production methods. Automatic welding and boring provide strength and precision. The Volvo BM 4300 is therefore able to withstand heavy, continuous stresses over a long period of time. It is reliable and efficient.



Precision steering

Owing to its small turning radius, the 4300 can manoeuvre easily in confined spaces. And with its rapid acceleration, the operator can dramatically reduce the time for each work cycle. Steering then becomes a vital function over each working day. The Volvo BM 4300 has a



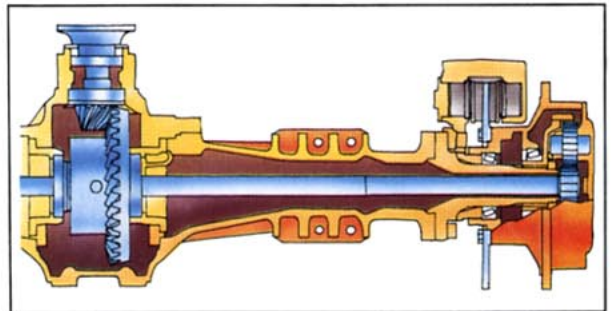
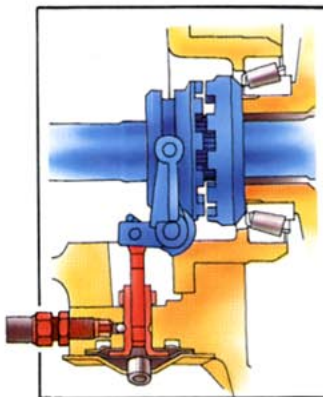
steering system that gives a positive response to every finger light movement of the steering wheel. Hydraulic oil is delivered by a piston pump with variable flow that can be regulated as needed. The 4300 system has the following advantages:

- faster and easier steering over uneven terrain.
- lower fuel consumption due to lower circulation pumping losses.
- reduced noise level.



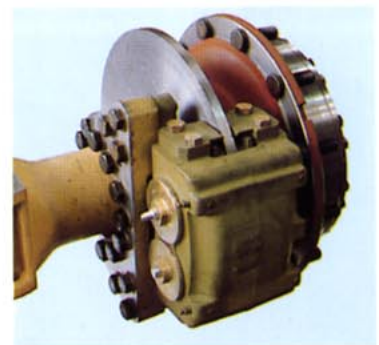
Strong axles

Axles on loaders are subjected to severe stresses. Volvo BM loaders have fully floating axles with planetary hub reductions. Axle mounts have precision-machined surfaces for perfect fit and the front axle has an air-operated differential lock with 100% lock-up.



Reliable and efficient brake system

A loader is braked many hundreds of times during each shift. Therefore it is absolutely vital for the brake system to have ample capacity and be completely reliable when subjected to continuous use. The Volvo BM 4300 has a dual pneumatic-hydraulic brake system with disc brakes on all wheels.

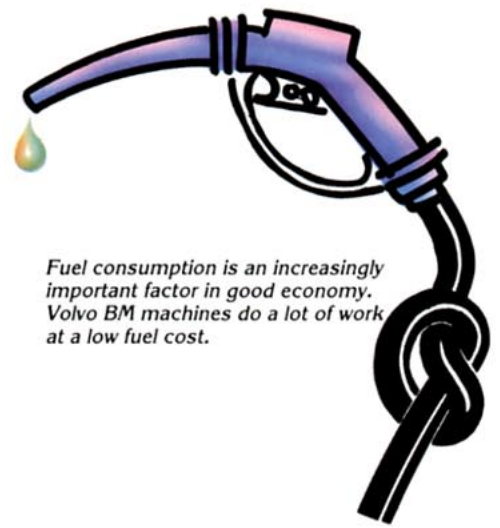






FUEL ECONOMY

It takes more than good engine design to achieve good fuel economy. To ensure that a continuous and arduous job can be completed with minimum fuel costs, all operating functions must work in complete harmony. Volvo BM loaders are built for good fuel economy right from the start. Our designers have eliminated power losses wherever possible and concentrated on the optimum utilization of power within the normal operating range of the engine. Turbo charging feeds the engine with large additional volumes of air, producing a more efficient combustion and improved fuel efficiency. The transmission, hydraulics, steering and loader unit are all matched to the power output of the engine. Each component draws no more power than it needs.

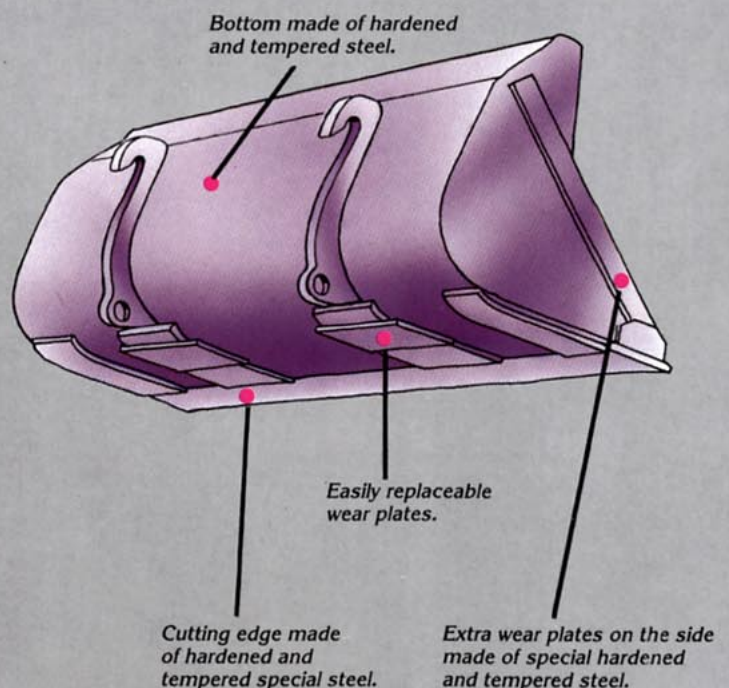


Fuel consumption is an increasingly important factor in good economy. Volvo BM machines do a lot of work at a low fuel cost.

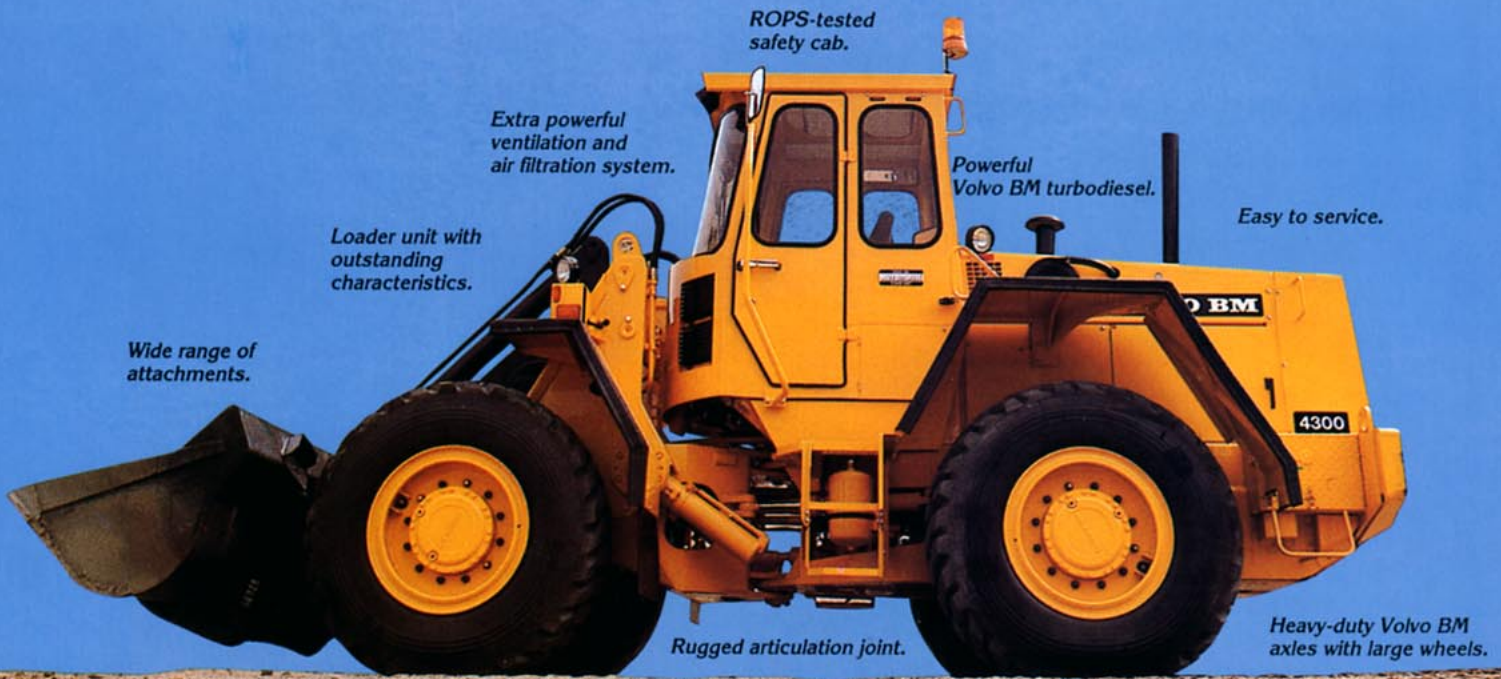


GENUINE VOLVO BM ATTACHMENTS GIVE OPTIMUM OVERALL ECONOMY

When choosing attachments, you should demand the same standards of quality and operation as you do when choosing your loader. Attachments marketed by Volvo BM meet the most stringent requirements imaginable and are specially tested to suit Volvo BM loaders. The product plate that is now found on all genuine Volvo BM attachments is your guarantee that the attachment has been tried, tested and approved by Volvo BM. That's comforting to know.



	ARTIKEL / PART	NR	
	TILLV / MANUF	NR	
	VIKT / WEIGHT		kg
	MAX TRYCK / PRESSURE		MPa
	MAX LAST / SAFE LM		kg
	WORKING LOAD LM		kg
			m ³
VOLYM / VOLUME / AREA			m ²
VOLVO BM SWEDEN			



Well designed and practical

Built into every Volvo BM 4300 is the wealth of knowledge gained through many years' experience in world markets, operating under many and varied working conditions. The new 4300 is therefore a very practical machine which is simple and easy to maintain, offering higher efficiency and greater job satisfaction.

The pictures show:

- generous service access panels for inspection and filling.
- transmission oil can be checked from ground level.
- sight glass for radiator fluid.
- protected lights, flashers and direction indicators.
- easy-to-open and lockable engine access panels.
- conveniently extended rear axle lube nipples.
- cleaning and replacement of air filter.
- conveniently located tool box and lockable fuel cap.
- drop-away battery cover for easy care and inspection of battery.





The Volvo BM 4300 is a highly efficient and versatile loader. Its size makes it economical for most jobs, being just as well suited for bucket loading as for materials and timber handling.

VOLVO BM
VOLVO BM AB ESKILSTUNA SWEDEN

The manufacturers reserve the right to change specification or design without prior notice. Illustrations do not necessarily show the machine in its standard version.

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