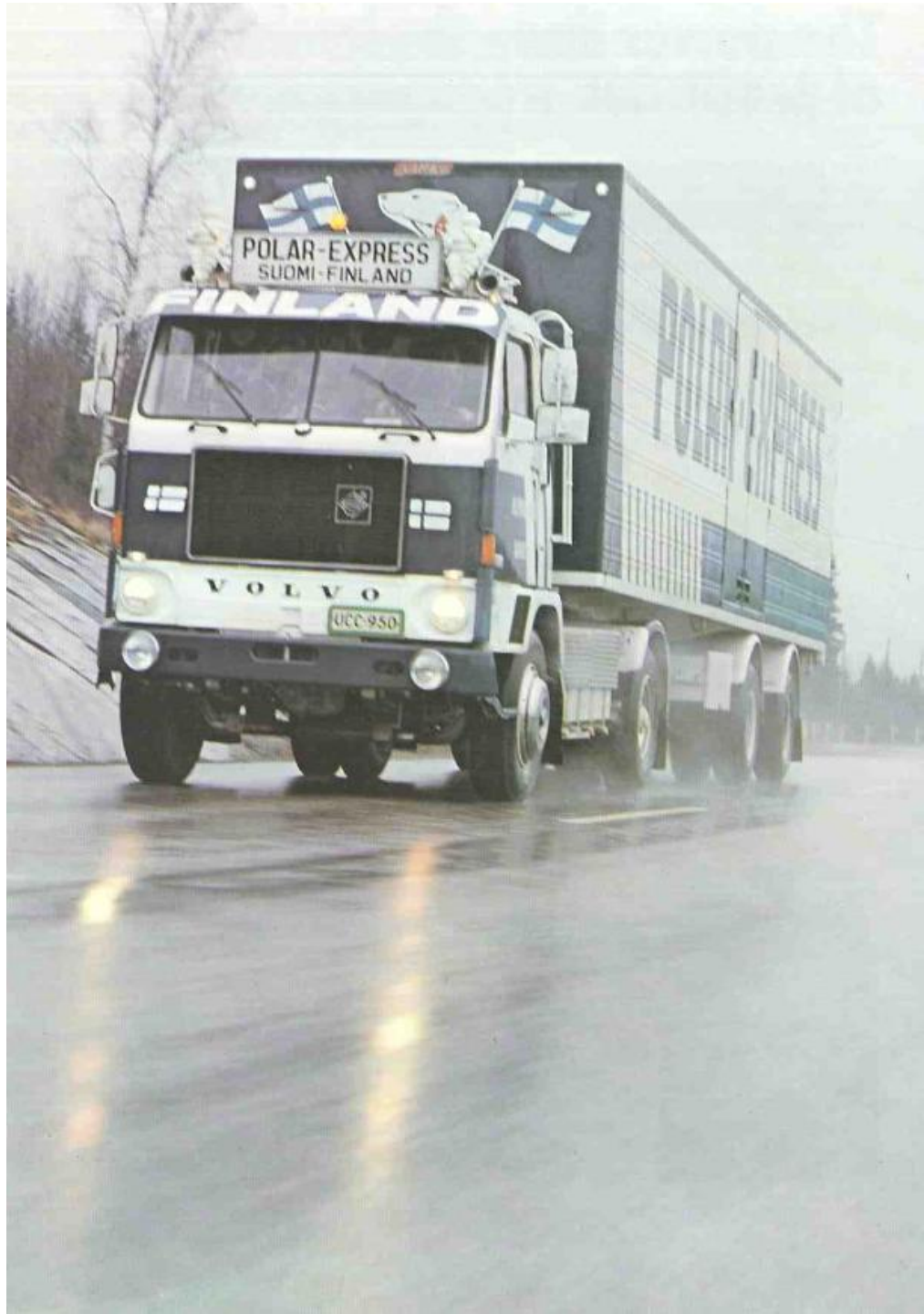




VOLVO
F88

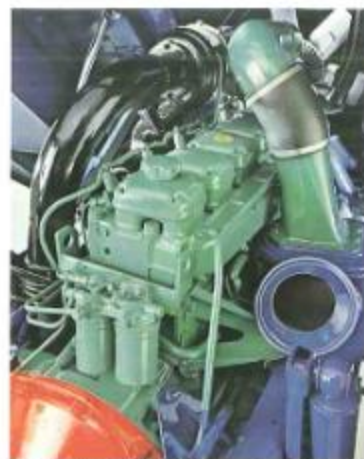


The power line - the basis of profitable transportation

Volvo trucks have a very well matched power line which means that all major components - engine, gearbox and final drive - are designed to give a winning combination of economy and reliability.

An engine need not be over-dimensioned to be sure of sufficient power when it is

needed. With the right type of gearbox and final drive you will always have sufficient tractive effort. And remember, an excessively powerful engine costs more - it weighs more, thereby reducing the payload - and it means quicker tyre wear and, of course, higher fuel consumption.



Volvo's well-tested TD100A in-line, six-cylinder turbo-charged diesel powers the F88-series.

The TD100A is a direct-injected, in-line, six-cylinder turbo-charged diesel which, in likeness with other Volvo turbo-charged engines, features a low level of noise and clean exhaust gases. This engine is built to give good fuel economy and to simplify servicing and maintenance. Each cylinder has its own individual cylinder head with steel gasket. The pistons are made of aluminium-alloy and replaceable wet-type cylinders are used. Both the camshaft and crankshaft have seven bearings.

Due to the three-point mounting system of the engine, it is not affected by frame twisting. The air compressor and servo pump are gearwheel driven to ensure functional reliability. Oil, fuel and air are cleaned in paper insert filters of disposable type. A special indicator shows when the air cleaner is blocked. For reliable operation in the hottest of climates, the engine has an oil cooler.

The trucks of the F88-series have a single plate clutch with the exception of the F88S which has a twin plate clutch.



The frame is of constant width and has straight sides and a flat top totally void of protruding rivets for easier superstructure work.

There are also two gearboxes to choose from, the eight-speed R61 range gearbox or the 16-speed SR61.

There are also two final drive options, a double reduction unit or, for the toughest of construction site work, a single reduction with hub reductions. Both final drives are of hypoid type and are available with a number of optional ratios to suit the particular type of work.



A perfect match - clutch and gearbox



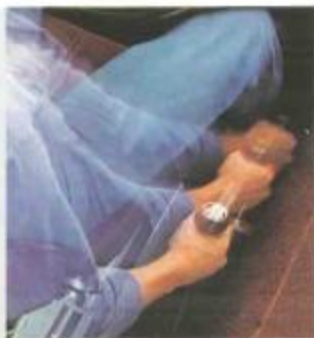
The SR61 comprises a four-speed basic gearbox with range section and an overdrive. This combination gives 16 fully-synchronised ratios and is ideal for long-distance use. The ratios are well spaced, this enabling the driver to keep up high averages. When using the power take-off, the SR61 gives two optional speeds.



The Volvo P88 has an immensely durable clutch which is air-assisted for ease of use. All models have a 16.5" single plate clutch with the exception of the FB88 with hub reductions, which uses a 14" twin plate clutch.

To be able to use the full potential of engine speed, the gearbox must have a sufficient number of ratios to suit the type of service the truck will be used in. The Volvo F88 can be specified with either the eight-speed R61, or the SR61 which has 16 speeds.

Changes between the two speed ranges are easily accomplished by means of a toggle switch on the gear lever. A range interlock prevents inadvertent changes from High to Low should the speed of the outgoing transmission shaft be too high. Both gearboxes are available with three power take-off options: two rear-fitted, one side-fitted.



Two strong rear axle options



A Volvo rear axle in a laboratory test. The amazing strength and toughness of these axles is clearly illustrated by the fact that they can be twisted about a complete turn without falling.

In both cases, a two-stage clutch down is used in the final drive. Final drives which work under the most demanding operating conditions or with very heavy weights, benefits can be gained by Volvo's bevel epicyclic hub reduction. Since this reduction is carried out on the wheels themselves, stresses on the shafts are reduced by 50%.

Both of these final drives include a differential lock for use when the road is soft. It is operated from the dashboard and a warning lamp shows when engaged.



The single reduction final drive with hub reduction is available with ratios of 4.88:1, 5.58:1 or 6.48:1.



The double reduction final drive is available with ratios of 4.92:1 or 5.43:1.

Like the Volvo engines and gearboxes, the rear axles are also manufactured in our own plants. This means that the same exceptionally high quality control standards apply to the entire power train. It also means that the engine, gearbox, and final drive are designed to match each other. Which is why operational economy, ease of use and reliability can always be taken for granted in a Volvo.

The finishing touches in adapting the power line to the work in hand - as far as starting torque, traction and cruising speed are concerned - are made by the rear axle and final drive. Here again, the Volvo F88 offers a choice: double reduction or single reduction with hub reductions.

A truck must be fully adapted to its main tasks if maximum payoff potential is to be reached. Thanks to the wide range of choice concerning the chassis and rear axle, a Volvo F88 can be purpose-built to suit practically any type of operation from the

toughest of special transport to fast long-distance service. Add to this the fact that through wide experience gained in all parts of the world, Volvo can give you the best advice available for your particular transport application.



F88 tanker



F88 tractor with dumper semi-trailer



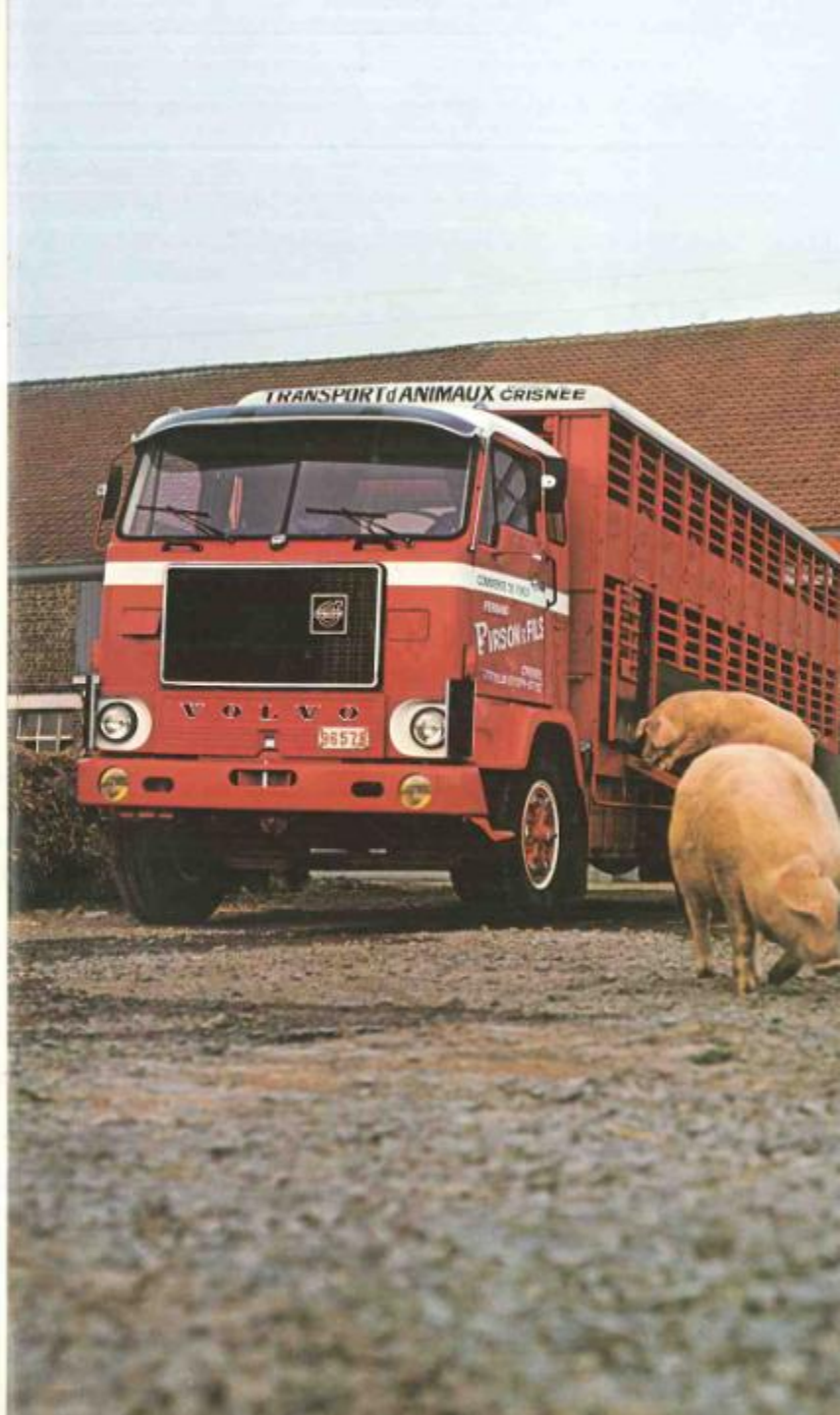
F88 tractor with tarp semi-trailer



F88 rigid with tarp



F88 tractor with container semi-trailer





F88 tractor with container semi-trailer



F88 tractor with tipper semi-trailer



F88 tractor with tanker semi-trailer



F88 tractor with container semi-trailer



F88 tractor with bulk semi-trailer



F88 tractor with tanker semi-trailer

The F88 at work



F88 with van body for general goods

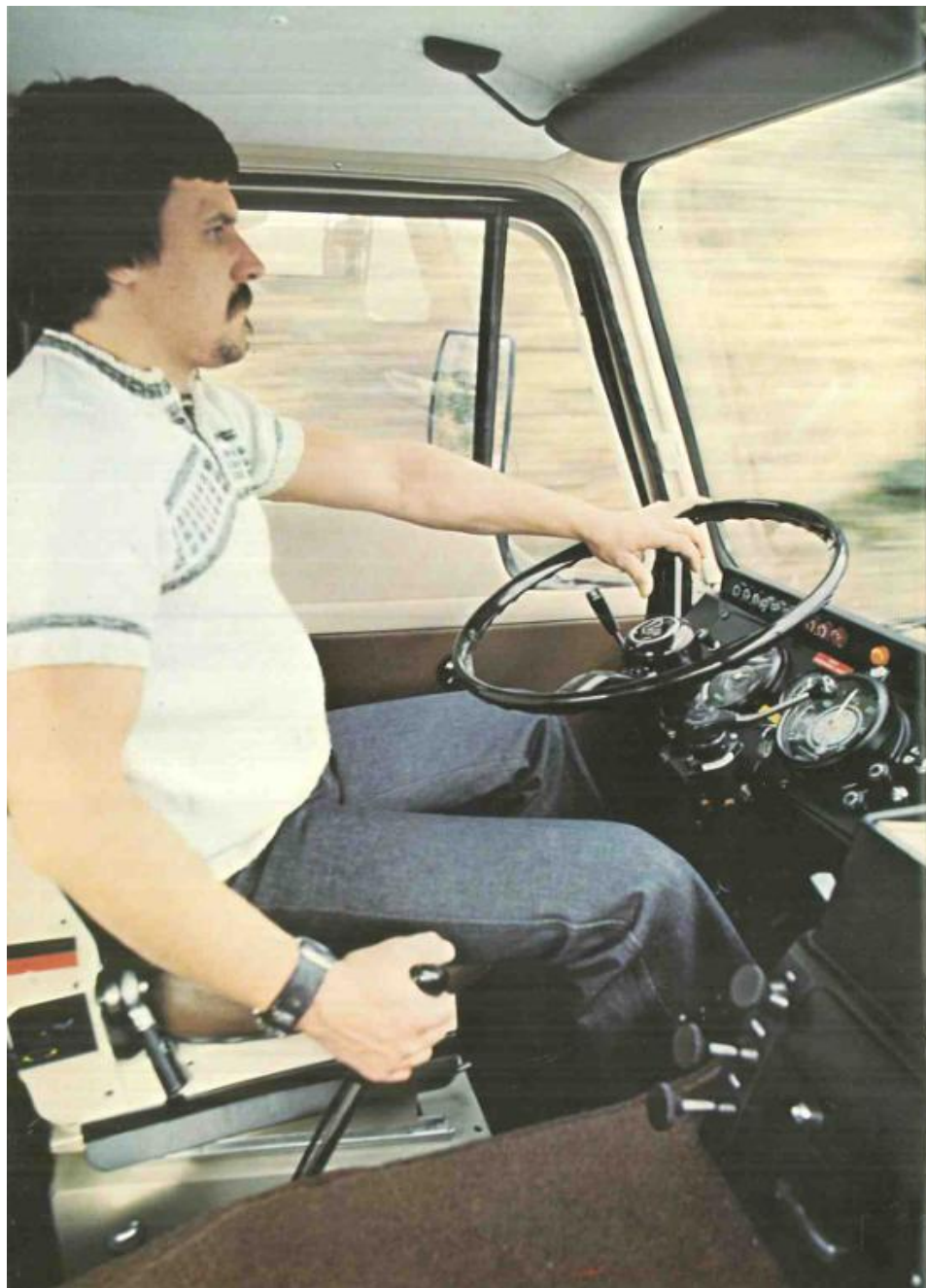


F88 rigid with tipper platform and trailer



F88 tractor with bulk semi-trailer

F88 with van body for foodstuffs



Safety and comfort aren't luxuries

A truck driver has a hard job, a job which is made easier in a Volvo. The driver deserves a practical, comfortable and safe cab. In a Volvo he gets one. There's quite a lot of research behind the Volvo cab. Studies involving ergonomics – the science of human engineering – laboratory tests and field trials, as well as noise level tests and much more lie behind the design of the new cab of the Volvo F88.

As far as down-to-earth safety is concerned, the Volvo cab conforms with the very stringent Swedish safety requirements. These call for the cab to withstand the dynamic impact of a 1,000 kg weight dropped from a height of three metres against both the windscreen posts and the rear wall of the cab. After this rough treatment, the roof of the cab must withstand a static load which is the equivalent of twice the service weight of the vehicle, up to a maximum of 15 tons. And the cab must survive these tests without sustaining any serious deformation and without the doors bursting open.

Although the Volvo cab has had an enviable reputation for many years, the new one is even better. It's quieter, the



windows are of safety glass and the entry steps are improved. The seats are more comfortable and better sprung. In addition, the driver's seat is fully adjustable for driver height and weight to ensure his sitting comfort.

The heating and ventilation system is dimensioned for the Nordic winter climate. For warmer weather, a roof hatch is standard.

The F88 can be specified with either a short cab or our very comfortable sleeper cab. The sleeper cab has a hydraulic tilting system as standard. Interior trim is attractive yet hard-wearing, a very pleasing shade of brown being used throughout. And all materials are fire-resistant. A bottle rack is incorporated by the door panel which on the driver's side also has a special document holder and room for a first-aid kit. The sleeper cab has very comfortable bunks which are upholstered in the same attractive type of brown cloth as the seats.

The lighting system now has a relay which switches over automatically from dipped headlights to parking lights when the engine is switched off. Other improvements for greater safety and comfort are the large, vibration-free mirrors which on some markets are heated electrically, the two-speed windscreen wipers which incorporate an interval relay and the larger capacity turn indicator relay. For first-time winter starting, the engine has an automatically engaged starting heater.





The heating and ventilation system has a high capacity even when the truck is idling. The controls can be locked in any position and are clearly marked. As an optional extra, the F88 can be specified with a complete air conditioning system.

Thanks to the very efficient power assistance, the F88 is easily steered in all situations and on all types of surfaces. The instruments, controls and warning lamps are ideally positioned with regard to frequency of use and in addition to simplifying the driver's work, they also make it safer. The clutch, gear lever and also the range gear and overdrive controls are light and easy to use. The parking brake is mounted on the engine casing. All the control and warning lamps are grouped in front of the driver where they can be seen in an instant. A warning lamp and buzzer tell when a power take-off is engaged. The differential lock also has a warning lamp. Most of the fuses and relays are interchangeable and they are mounted inside the radio console for easy access.

The electrical system is generously dimensioned with plenty of capacity for extra equipment. The powerful headlights incorporate parking lights. The tail light cluster has separate bulbs for the turn indicators and brake lights. Halogen headlights are available as an extra on some markets.

Progressive springing

A correctly designed suspension means a lot to safety, to the condition of the goods carried and to the ride. Two major design innovations combine to give the F88 a very modern suspension system: The progressive action of the suspension and the use of parabolic springs. Progressive springing means that the active length of the spring

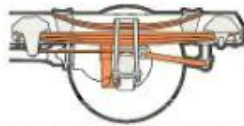
alters in step with the load. This means that you get the correct stiffness of suspension whether the truck is running empty or loaded. The parabolic spring is characterised by a tapering off of thickness from the centre. The design gives the same amount of stress in each part of the spring as it is loaded. Parabolic springs are available on F88 prime movers and the FB88 (with a single drive bogie) has parabolic springs as standard on the bogie.



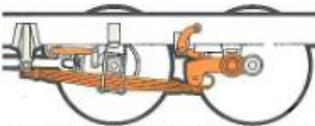
Front parabolic springs combined with double-acting telescopic shock absorbers.



Progressive rear suspension with helper springs.



Parabolic rear suspension with shock absorbers and stabilisers.



Parabolic springs and stabiliser on an FB88 bogie. The balance arm of the trailing axle is supported by a steel roller.

Safer braking

The braking system of the F88 gives straight-line stopping every time. Thanks to the long stroke of the brake pedal, braking is smooth and easy. The service brakes have two separate circuits which also feed the trailer brakes when used. The trailer can also be braked by means of a separate hand control on the steering column. The parking brake is of spring type and is released by means of compressed air. A load sensitive valve and an exhaust brake complete the braking system. During the winter, the compressed air tank and brakelines are kept in full operational trim by means of an anti-freeze unit.



- Separate trailer brakes
- Service brakes, front wheel circuit
- Service brakes, driven wheel circuit
- Parking brake

Maintenance and economy

Volvo trucks are built to last. But they do require service which is why they're also designed to facilitate workshop operations. When the cab is tilted, the engine, transmission and entire front end are fully accessible. Powerful torsion springs assist in tilting the cab. The sleeper cab has,

as standard, a hydraulic tilt mechanism. Day-to-day inspections do not require the cab to be tilted. Opening a service hatch in the front discloses the oil dipstick and the oil filler pipe. And all the fuses and relays are mounted in the radio console inside the cab.



System Service

We all know that a truck must be economical to be worthwhile. Regular maintenance at a Volvo workshop can reduce running costs and cut standstills to a minimum...

This is what System Service is all about. This project consists of a mileage-based section for regular lubrication, etc., and a time-based section which includes two basic inspections annually. In this way, the road condition of the truck is safeguarded. The basic inspection calls for the checking of no less than 150 points on your Volvo.

Contract Maintenance

A fleet owner can avoid many risks in his trucking operations if he signs for Contract Maintenance when he buys his new Volvo. This system means that the owner pays a fixed service cost at regular intervals and in a way it means that he is almost making the authorised Volvo workshop his own.

Service is not an expense — it's an investment!

Invest in regular maintenance. Fix the small faults before they get bigger and more expensive. If you do so, you can plan your transport schedules weeks and months ahead. With Volvo Service behind you, you can draw up accurate long-term plans for your fleet. But there's much more to win. Unexpected breakdowns will become very rare to say the least. Your vehicles can be utilised more economically. And an improvement in reliability means better goodwill for your company.

Standstills and reliability

Cutting standstills gives a considerable saving. A standstill can cost between about £65 and £210 per vehicle and day. With regular preventative service, they will become a thing of the past. Your trucks will be on the road longer, bringing back

more profit. The difference between conventional and preventative service mean a time saving of up to 40 hours per truck and year. And time is r

Road safety

A truck that's looked after feels safe and is safer. The inbuilt safety of a Volvo will be maintained and looked after. It should be through our regular preventative service schemes.

Trade-in value

A well cared for truck is a valuable asset. A truck which will bring you a high trade-in price.

Total economy

The name of the game is economy. Over the longer operational life of a truck, costs are considerably lower if preventative service is used. In fact, costs can be cut almost in half.

Replacement parts and exchange service

Using Genuine Volvo Parts, your truck will be kept like new. And using the Volvo Exchange System, costs can be kept at the bottom. These factory reconditioned parts are covered by the same warranty and quality requirements as all Volvo Parts.

Accessories



Parking heater

Heats both the engine and the cab. Runs off the engine fuel. Can be pre-set by means of a timer up to 22 hours previously. Thermostatically controlled.



First-aid kit

A must in any truck, this first-aid kit means you are always equipped - just in case...



Front Runner - seat covers

Available for both the driving and passenger seats. Three different colours (brown, red, blue). 100% nylon, hard-wearing, machine-washable, fire-resistant.



Radios

FM/AM, MW/LW or FM/MW/LW. Push button controls. Complete with installation kit and loudspeaker. 24-month warranty.



Radio/Stereo tape player

Volvo 4 Stereo player with FM/AM, MW/LW radio or FM/AM/MPX Stereo radio. Volvo 8 stereo tape player with FM or MW/LW radio. Complete with installation kit and loudspeaker. 24-month warranty.



Extra bunk

Fits above the standard bunk. Folding type. Steel frame with wood base. Thick foam rubber mattress. Cloth upholstery in brown or blue.



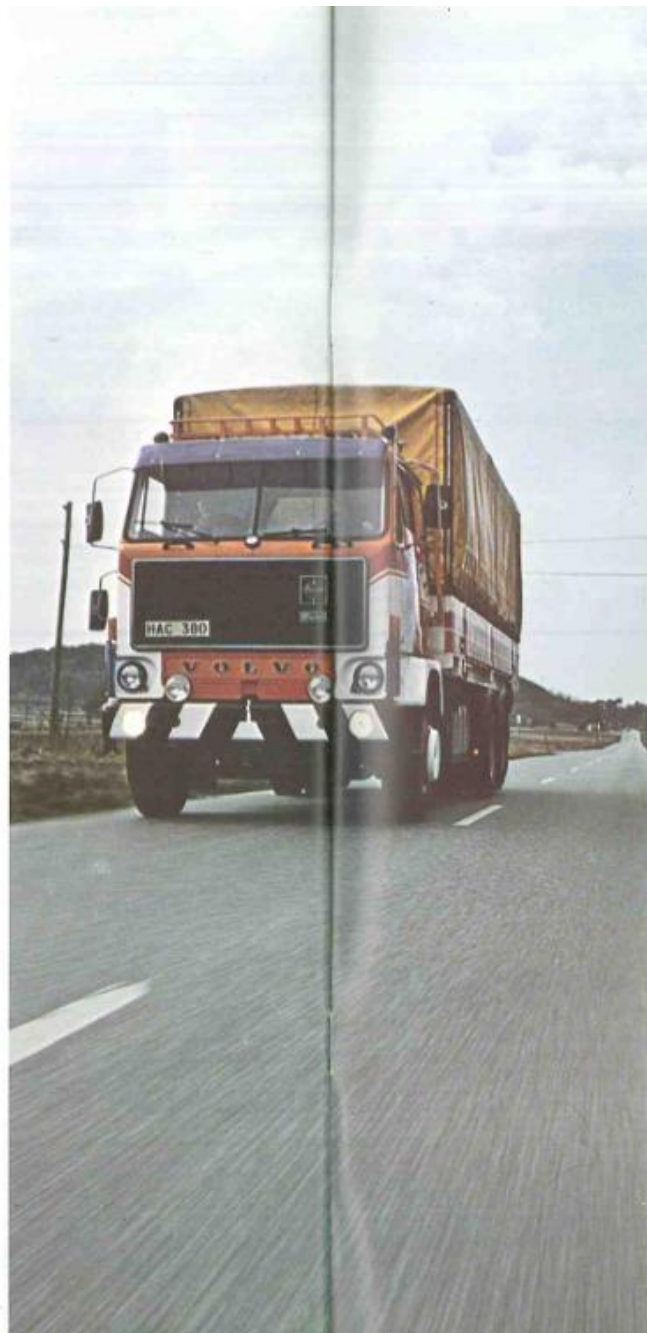
Air conditioning

Hot and dusty? Fit a Volvo air conditioning system and you can keep cool with the windows closed and dust and exhaust fumes where they should be - on the outside.



Refrigerator box

Capacity 24 litres. runs off vehicle's 24-volt system. Manufactured of plastics and has stainless steel lid. Separate compressor.



Dirt deflectors

Let the wind do the work for you. Fitted to the front corners of the cab, these deflectors form a cushion of air which prevents road dirt from covering the side windows.



Loading lamp

Adjustable height and fully-swivelling. Very practical.



Rubber floor mats

Tailor-made. Easily lifted out for cleaning.



Roof-rack, roof ladder

The roof-rack is made of primer painted tubular steel and has pressure-impregnated wood slats. A roof ladder gives easy access to both the platform and roof.



Mudflaps

Black rubber. Hard-wearing. Easily fitted. Strong anchoring points.



Compressed air horn

A very powerful horn which penetrates even the loudest of traffic noise. For safety's sake.



Sun visor

Can be adjusted from either inside the cab or the outside, depending on the type of truck. Fully adjustable. Made of acrylic plastics of high quality and fitted with robust anchorages.



Back-up warning

Engaging reverse gear automatically switches on an alarm which warns pedestrians and other road users that the truck is reversing.

Electrically heated rearview mirrors

Always free of mist and frost whatever the weather.

