

# **VOLVO**

## **1971**







### Volvo 142

Basic version of our 140-series. In a new range of colours. And new cloth/vinyl upholstery. Attractive and hard wearing. Otherwise, much is the same. The seats still feature an extremely generous range of adjustment including lumbar support and height-adjustable head restraints. The engine, just as strong and reliable as always develops 90 b.h.p. SAE.



### Volvo 144/145 de Luxe models

The de Luxe models are, of course, a little more comfortable, a little more elegant. Fully carpeted and with a new frontal appearance. The wheels are also wider and shod with radial ply tyres. The de Luxe cars are available in a wide range of colours. And some are new this year. You can specify your de Luxe model with a 90 b.h.p. SAE engine and a four-speed manual or fully-automatic transmission. For more go you can choose the 118 b.h.p. SAE engine with four-speed manual, with or without overdrive.

Our 145 de Luxe estate car is also available with these two engines.

# The Volvo 140-series

The 140-series has grown. The options are more numerous.

You can now choose between . . .

- The Volvo 142, our basic car with all the fundamental Volvo advantages . . .
- Volvo 144/145 de Luxe models with a little more to offer. Of elegance and comfort. And there's more to come . . .
- The aristocrat of the 140-series. The Volvo 144 Grand Luxe. With genuine leather upholstery. Impressively powerful. Impressively attractive.

Common to all these Volvo models is that they are all available with varying specifications compiled to please the discerning motorist. And they are designed and built in the Volvo tradition of giving utter strength and reliability coupled with safety and economy.







### Volvo 144 Grand Luxe

The Volvo 144 Grand Luxe. In a class of its own. The B 20 E engine has seen to that! This car can compete with many a sports car—and you can do it in comfort. The B 20 E features electronically-controlled fuel injection, gives 130 b.h.p. SAE.

The interior is exclusive to say the least. So are the seats, leather upholstered, comfortable, wide and accommodatingly adjustable. The wheels have wider rims and carry radial tyres. The wheel nuts are chromium. And the new style grille gives a hint as to what is hiding under the bonnet. Two quartz-halogen spotlights are standard features!



### Admit that it looks inviting

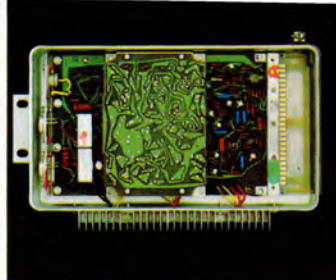
The seats in our de Luxe versions are upholstered in a new textile material available in a wide colour range. Each of which is matched to the exterior finish. The possibilities of adjustment are many to meet all individual requirements. Full carpeting in matching colour tones underlines the comfort aspect. The transmission tunnel carries a centre

# Volvo

Floor the pedal! Fe  
The excellent torque  
range speeds gives  
cuts gear changing  
The 1971 Volvo 16  
also has a console f  
front seats and an e  
firm on new wider r  
Other features are  
adjustable head res  
emergency warning







### Comprehensive engine programme

The common denominator for the Volvo engine programme is Abundance. Of power and strength. The electronically-controlled fuel injection system on the 130 b.h.p. SAE unit combines pure sports car performance with good fuel economy and effective exhaust emission control. The carburettor-equipped 90 and 118 b.h.p. SAE units provide a very high degree of torque and, consequently, smooth and unfussy running. These three engines are all four-cylinder units. The B 30 engine powering the Volvo 164 gives 145 b.h.p. SAE. Six-cylinders. Powerful. Quiet. Refined. The type of transmission depends upon the engine and model chosen. Options are four-speed with or without overdrive and the Volvo fully-automatic transmission.

console for oddments and an electric clock. Three-point safety belts are standard for the front seats. The leather upholstery emphasizes the welcoming comfort of the Volvo 144 Grand Luxe model which also has automatically retracting inertia safety belts for the front seats.

# 164

the six-cylinder surge! provided in the mid- wonderful adaptability and o a minimum. 4 with new colours and it r oddments between the lectric clock. And it stands m wheels—5½". nted windows. Fully rains. Four-way flashers. Radial tyres.

Two extra quartz-halogen foglights. Electrically heated rear window. And on some models—a sun roof. The Volvo 164 is built for people who want more of the niceties of exclusive motoring. A car for the man with money to spend, not burn.

### The Guardian Car!

A Volvo car is built to look after the motoring side of life. A Volvo car body gives maximum safety. The front and rear sections are designed to absorb impact collisions while the passenger area remains intact. This is assured by the reinforcing members around all body openings forming a safety cage within which you sit. A car that isn't designed with "planned obsolescence" deserves to live a long time. And so Volvo rust proofing is thorough, from the ground up. For instance, exposed sections such as the front surrounds and the door sills are hot-dip galvanized. This is one explanation to Volvo's legendary long life and high exchange value. Each new Volvo has a coat of paint on top of a coat of paint! Which is sprayed on top of two preparatory coatings. With careful inspection at every







### Dual-circuit triangle-split brake system

Volvo has one of the most advanced brake systems available. Dual-circuits. Triangle-split. Each circuit power brakes both front wheels and one each of the rear wheels. Should one circuit fail (a tell-tale light on the instrument panel would show this) a Volvo only loses braking effect on one rear wheel. Since the loading is greatest on the front wheels during braking this means that a Volvo with only one brake circuit in operation retains about 80 % of full braking effect.



### The ultimate in comfort and elegance

The seats are adequately firm. To give support without being tiring. Their range of adjustment is wide.

The full carpeting and leather upholstered seats give the Volvo 164 a distinguished and utterly elegant atmosphere. The retractable inertia seat

belts give automatic length adjustment. Call the Volvo 164 a rolling conference room by all means. It's often used as such. The possibility of working undisturbed in such pleasant surroundings is worth a lot. Don't you think?







## Volvo 145 Express

The Volvo 145 Express is intended for those of you who move things on a professional basis. It is built for these purposes. With the same performance and road manners as our saloon models. With a raised roof line to give engulfing spaciousness.

And it can take rough treatment. The seats are upholstered in hard wearing material. And are Volvo car comfortable. That's an important point for those of you who spend most of your working day behind the wheel.

Tough skid rails protect the floor which is about 6½ ft. long! This gives almost 85 cu.ft. of space. The width is no less than 56 in. And thanks to the raised roof line the height is practically 40 in. Above the driving compartment where the roof line drops to a lower level the car has a roof rack. Between the cargo area and the front seat area is a very strong steel mesh screen. That's safety for you!

The Volvo 145 Express is available in two versions. One with full glazing and the other with metal-panelled sides. The fully glazed version is available either with or without the rear seat. The engine is our 90 b.h.p. SAE unit.



The electrically heated rear window does away with mist and frost and the washer and wiper unit keep things clean!







## Volvo 145 de Luxe

The Volvo 145 de Luxe is built for people who want the comfort of the saloon with the carrying capacity of an estate. The Volvo 145 de Luxe has lots of space—and all the practical niceties of a saloon. It has full carpeting. A centre console for oddments and an electric clock. The seats are upholstered in a new textile material with new colours. And as before the Volvo seats feature full adjustability. The grille style is new. As are the wider rim wheels which now carry radial tyres. With the rear seat folded down the cargo area is no less than 74 in. long. Height is 33 in. and the width is practically 52½". And in addition there's practical storage space below the floor providing about 3½ cu.ft. of extra *concealed* storage. You can choose your Volvo 145 de Luxe with either a 90 b.h.p. SAE or 118 b.h.p. SAE engine.



## Volvo 1800 E

The Volvo 1800 E—for sports car enthusiasts who appreciate comfort! Who know what comfort means on long journeys. Both for your disposition and your safety. With sumptuous leather upholstered bucket seats. And plenty of room for luggage. For motorists who know what quality means in the long run. For those who appreciate all the reliability and safety which a Volvo represents. Take her out for a run! A trip behind the wheel of this car with its electronically-controlled fuel injection engine at your command will convince you that Volvo is for you!





# Specifications

## Engine

B 20 A: 90 b.h.p. SAE, 82 b.h.p. DIN  
On 142 basic, de Luxe models and 145 Express.

B 20 B: 118 b.h.p. SAE, 100 b.h.p. DIN  
On all de Luxe versions.

Four-cylinder overhead valve engine with five-bearing crankshaft. Thermostatically-controlled induction air pre-heating. Positive crankcase ventilation. Exhaust emission control.

B 20 E: 130 b.h.p. SAE, 120 b.h.p. DIN  
On all Grand Luxe models and 1800 E.

Four-cylinder electronically-controlled fuel injection with five-bearing crankshaft. Fuel pressure and overflow sensor. Electric fuel pump. Positive crankcase ventilation. Exhaust emission control.

B 30 A: 145 b.h.p. SAE, 130 b.h.p. DIN.  
On 164 saloon.

Six-cylinder overhead valve engine with seven-bearing crankshaft. Thermostat-controlled induction air pre-heating. Positive crankcase ventilation. Exhaust emission control.

	B 20 A	B 20 B	B 20 E	B 30 A
Max. output b.h.p. at				
r.p.m. SAE	90/4800	118/5800	130/6000	145/5500
Max. output b.h.p. at				
r.p.m. DIN	82/4700	100/5500	120/6000	130/5000
Max. torque kpm at r.p.m.				
SAE	16.5/3000	17/3500	18/3500	22.5/3000
Max. torque kpm at r.p.m.				
DIN	16/2300	15.5/3500	17/3500	21/2500
Displacement, litres	1.99	1.99	1.99	2.98
Bore, mm	88.9	88.9	88.9	88.9
Stroke, mm	88.0	80.0	80.0	80.0
Compression ratio	8.7:1	9.3:1	10.5:1	9.3:1

## Cooling system

Sealed. Water cooling, pump and thermostat.  
Capacity Volvo 164 13 litres/2.9 galls., 140-series 10 litres/2.2 galls., 1800 E 8.5 litres/1.9 galls.  
Cooling fan with slip-coupling on Volvo 164 and 1800 E.

## Electrical system

12 volt system.  
Battery capacity 60 Ah.  
Alternator 35 A—490 W  
Alternator, Volvo 164 55 Ah—770 W  
Starter motor output 1 hp.

## Transmissions

Four-speed fully synchronized.  
Volvo 164 and 1800 E with remote control.

Ratios:

## 140-series and 1800 E

1st 3.13:1

2nd 1.99:1  
3rd 1.36:1  
4th 1:1  
Reverse 3.25:1

Ratios:

## Volvo 164

1st 3.14:1  
2nd 1.97:1  
3rd 1.34:1  
4th 1:1  
Reverse 3.54:1

## Overdrive

Is electrically operated.  
Available with 118 b.h.p. SAE engine on 144 de Luxe, the electronic fuel injection B 20 E engine and the B 30 engine on the Volvo 164. Standard for Volvo 1800 E.  
Ratio: 0.797:1.

## Automatic transmission

Fully-automatic with part-throttle change-down and kick-down. The automatic

transmission is only available on certain models.

## Clutch

Single dry disc clutch of diaphragm spring type. Mechanical control

## Steering gear

Volvo 164: Recirculating ball and nut type.  
Others: Cam and roller type.

## Turning circle diameter

### Between kerbs

140-series  
9.25 m/30 ft. 4 in.  
164  
9.6 m/31 ft. 6 in.  
1800 E  
9.5 m/31 ft. 2 in.

### Between walls

140-series  
10.0 m/32 ft. 10 in.  
164  
10.5 m/34 ft. 5 in.  
1800 E  
10.0 m/32 ft. 10 in.

## Brake system

### Foot brake

Triangle-split dual circuit brake system. Each circuit operates on both front wheels and one each of the rear wheels. Self-adjusting disc brakes on all wheels. Power assisted. A relief valve in each brake circuit prevents the rear wheels from locking up before the front wheels in emergency situations.

### Handbrake

Mechanical, operating on separate drum brakes on rear wheels. Handbrake lever located between driving seat and front door. Warning lamp on facia for parking brake circuit.

### Running equipment

142 basic and 145 Express have 4½" pressed steel wheels, stainless hub caps. Tyres 165 SR 15.

The de Luxe versions have 5" pressed steel wheels and special hub caps. Radial ply 165 SR 15 tyres.

Grand Luxe versions have chromium wheel nuts and chrome trim ring on 5" rim wheels of new design. Radial ply tyres 165 SR 15. The Volvo 164 has 5½" pressed steel wheels of new design with hub caps and chrome trim ring.

Radial ply 165 SR 15 tyres.

The Volvo 1800 E has 5" pressed steel wheels with "mag" type cast aluminium hubs. Radial ply tyres, 165 HR 15.

## Fuel tank

Located at rear.  
Capacity 1800 E=approx. 45 litres/10 Imp. gallons. Capacity, other models=approx. 58 litres/12¾ Imp. gallons

## Heating and ventilation system

Large capacity, thermostatically-controlled heating and ventilation system. Quietly running two-speed fan. Air is fed to both front and rear seat areas. Three defroster nozzles for windscreen. In addition, fresh air intakes below dashboard on each side.

The air extractor vents give draught free through-flow ventilation. Check valves prevent exhaust gases and cold air from entering the vehicle. Electrically heated rear window (not 145 Express).

## Lighting equipment

Asymmetrical dipped headlights. Automatic reversing lights. Main beam flasher. Courtesy lights.

## Dimensions and weights

	140 sedans	Volvo 164	Volvo 1800 E
Overall length cm/in	464/182.5	471.5/185	435/171
Overall width cm/in	173/68	173.5/68.4	170/66.5
Overall height cm/in	144/56.7	144/56.7	128/50.5
Distance brake pedal-front edge rear seat back-rest cm/in	183/72	183/72	165/65
Front seat width, hip height cm/in	143/56.3	143/56.3	125/49.3
Rear seat width, hip height cm/in	143/56.3	143/56.3	100/39.4
Depth, front seat	49/19.2	49/19.2	49/19.2
Width, front seat	57/22.5	57/22.5	50/19.6

Kerb weights (full fuel tank, oil and coolant) approx:  
Volvo 142 1170 kg (2580 lb)

Volvo 144 de Luxe 1205—1235 kg (2602—2657 lb)

Volvo 145 de Luxe 1265—1285 kg (2789—2833 lb)

Volvo 144 Grand Luxe 1215—1245 kg (2679—2745 lb)

Volvo 145 Express 1230—1255 kg (2712—2767 lb)

Volvo 164 1335—1365 kg (2944—3010 lb)

Volvo 1800 E 1155 kg (2547 lb)

The manufacturers retain the right to modify design and equipment without previous notification.

# VOLVO

AB VOLVO GÖTEBORG, SWEDEN