We sold our first 1800 sports car in 1961. Since then the car has gone through thousands of engineering refinements and three designation changes: from P-1800 to 1800S and, in 1970 to 1800E.

This year we're introducing the 1800ES. And while the shape is new and the designation is new, the engineering inside is not. It's the result of an evolutionary process 11 years in the making.

So it's reasonable to expect that the 1800ES will enjoy the same reputation as other 1800's before it: That of a trouble-free sports car.
We extended the roof line to prolong your enjoyment

You can fill the trunk space in most sports cars with a spare tire and an overnight bag. This fact imposes not only a severe restriction on your clothes-carrying ability but on your fun as well.

The 1800 ES is designed to enable you to get away from it all longer. By extending the roof line back almost to the tail of the car, we created 35 cubic feet of trunk space behind the front seat. Now you can go off for two weeks without having to wear-and-wash your clothes every day.

There's even a certain smug pleasure to be gained in driving around town. Since we're making only 1657 of these cars for the American market this year, people will stop and stare. Yours will not only be the only 1800 ES on the block but quite possibly the only 1800 ES in the whole town.
The electronic fuel injection engine . . .

In 1970, we replaced the carburetors in Volvo's sports car with an electronic fuel injection system. Coupled with a little computer unit under the dashboard, the system metered out the exact amount of fuel the engine required to work at peak efficiency. The result was a cleaner exhaust and cleaner air. This year we've made the engine run on 91-octane gasoline. It not only produces cleaner air but better gas mileage and performance that only a test drive can demonstrate.

Of course, how fast you can go has never been of prime concern to Volvo. We're more interested in how long you can keep going. The B20F engine has been bench tested at the equivalent of 90 mph for 60,000 miles straight without breaking.

... and the computer that controls it.

The computer has electronic sensors that monitor air and coolant temperature, air pressure, rpm's and throttle position. From these five readings, the computer determines what precise quantity of fuel should be injected into the cylinders. And orders it injected.

Engine specifications
Displacement 121 cu. in.
Bore 3.50 in.
Stroke 3.15 in.
Compression ratio 8.1:1
Maximum output 115 hp SAE at 6,000 rpm
Maximum torque 120 lb. ft. SAE at 3,500 rpm

Cooling system
It gets you where you’re going in one piece.

A Volvo 1800 is built as one rigid unit, not pieced together. With coil springs and telescopic shock absorbers all around, even a lousy road won’t rattle it.

Enemy motorists won’t unnerve you quite so much. Four-wheel self-adjusting power disc brakes are standard. They can bring you from 60 mph to a straight, true emergency stop in less than 4 seconds.

Your arm won’t fall off from shifting all day. The engine with its 4-speed synchronized transmission delivers enough pulling power (torque) at low rpm’s to make city driving practically painless. (At highway speeds, an electrically-operated overdrive on the 4th gear cuts rpm’s and makes the engine’s work easier.)

Or, you can avoid shifting altogether with an optional three-speed fully automatic transmission.

And just to be on the safe side, you ride in a compartment surrounded by boxed steel pillars. To protect you from the sports in the other cars.

Transmission and Other specifications

Four-speed manual, fully synchronized with remote control shift linkage. Electrically-operated overdrive on fourth gear.

<table>
<thead>
<tr>
<th>Ratios</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.13:1</td>
<td>1.96:1</td>
<td>1.36:1</td>
<td>1.00:1</td>
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<tr>
<td>Reverse</td>
<td>3.25:1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overdrive</td>
<td>0.79:1</td>
<td></td>
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</tbody>
</table>

Optional three-speed fully automatic transmission with floor-mounted P-R-N-O-D-1 shift quadrant.

Clutch

Diaphragm spring type, single dry plate. Diameter: 8.5 in.

Steering gear

Type rack and pinion. Taper, lock to lock 3/4. Turning circle diameter: Between curbs = 31 ft. 6 in.

Rear axle

Ratio: Standard transmission 4.30:1, Automatic 3.91:1.

Front suspension

Independent with ball joints and rubber-mounted control arms. Anti-sway bar. Coil springs with telescopic shock absorbers. Drive shaft components and front suspension are lubricated for life.

Rear suspension

Solid rear axle carried by longitudinal rubber-mounted support arms and torque rods. Trunnion location by rubber-mounted track rod. Coil springs with telescopic shock absorbers.

Brake system

Four-wheel power-assisted self-adjusting disc brakes. Triangle split dual circuit system, each circuit operating on both front wheels and one rear wheel. Special rear wheel pressure relief valves ensure stability during emergency braking. Warning light signals if one circuit fails.

Wheels and tires

Balanced pressed-steel with safety ribs. 15" chrome wheel nuts and trim rings. 185/70 HR 15 radial tires.

VOLVO 1800 E
Our seats can out-perform any other sports car’s seats.

Bucket seats are standard equipment in both the 1800E and ES. They’re leather covered. But more important, they are designed by orthopedic surgeons who are well aware that no two human bodies are exactly the same.

So they adjust in a variety of ways to fit a multitude of individual shapes.

They travel forward and backward 7.9 inches.

They can be raised or lowered to different heights.

The backrests can be reclined to any position.

They can be made harder or softer with a built-in device called an infinitely variable lumbar support.

The result is that even at the end of a long trip, you’ll arrive relaxed. And can look forward to the pleasure ahead. Rather than the pain behind.

Instrumentation (including the standard tachometer) and dashboard layout in the 1800E and ES are the same. It’s just what’s behind the front seats that’s different.

The 1800ES rear window/taillight opens up a cargo-luggage area 39.8 inches long by 40.2 inches wide by 22.4 inches high. Which is not only great for a sports car but not bad for some soccer.
Look at the 1800E and ES as sports cars. But think of them as Volvos.

Volvos are cars with the adjustable bucket seats that Industrial Design magazine called "...an orthopedic delight..."

Volvos are cars with four-wheel power disc brakes. And with two split braking circuits of three wheels each. Volvos have 4 coat finishes outside where most cars have only four.

Volvos have two undercoats where most cars have only one. Volvos are built with the expectation that the original owner will want to keep it — and will be able to keep it — long after he's finished paying it off.

In all these regards, the 1800 E and 1800 ES are Volvos.

Other specifications:

<table>
<thead>
<tr>
<th>Electrical system</th>
<th>Track</th>
<th>Overall length (ES)</th>
<th>Overall width</th>
<th>Overall height</th>
<th>Unladen</th>
<th>Front seat width</th>
<th>Front seat height</th>
<th>Carburetor</th>
<th>Approx.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage 12 V</td>
<td>51.6 in.</td>
<td>171.3 in.</td>
<td>66.0 in.</td>
<td>50.4 in.</td>
<td>56.8 in.</td>
<td>50.7 in.</td>
<td>27.6 in.</td>
<td>2,490 lbs.</td>
<td></td>
</tr>
<tr>
<td>Battery capacity 60 amp hrs.</td>
<td>90 amp hrs.</td>
<td>120 amp hrs.</td>
<td>150 amp hrs.</td>
<td>180 amp hrs.</td>
<td>210 amp hrs.</td>
<td>240 amp hrs.</td>
<td>270 amp hrs.</td>
<td>300 amp hrs.</td>
<td></td>
</tr>
<tr>
<td>Alternator rating 55 amp</td>
<td>70 amp</td>
<td>85 amp</td>
<td>100 amp</td>
<td>115 amp</td>
<td>130 amp</td>
<td>145 amp</td>
<td>160 amp</td>
<td>175 amp</td>
<td></td>
</tr>
<tr>
<td>Starter motor output 1800W</td>
<td>2100W</td>
<td>2400W</td>
<td>2700W</td>
<td>3000W</td>
<td>3300W</td>
<td>3600W</td>
<td>3900W</td>
<td>4200W</td>
<td></td>
</tr>
<tr>
<td>Fuel tank</td>
<td>Dimensions and weights</td>
<td>Capacity approx. 11.9 gallons</td>
<td>Length 96.5 in.</td>
<td>Width 72.0 in.</td>
<td>Height 36.0 in.</td>
<td>Weight 3300 lbs.</td>
<td>Base 1000 lbs.</td>
<td>Gross 4400 lbs.</td>
<td></td>
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</tbody>
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