



SWEDEN 1981-1986



NUMBER 48

# Volvo 240 GLT TURBO

In the early 1980s, Volvo wanted to transform its safe but somewhat dull image. The solution was to add a turbocharger and almost 50 bhp to the 240—and race it in the competitive European Touring Car Championship where it proved highly competitive.

Produced by  
Volvo Car Corporation,  
Gothenburg, Sweden



## VITAL STATISTICS

Top speed:	107 mph
0-60 mph:	8.9 sec.
Engine type:	In-line four
Displacement:	2,127 cc
Max power:	127 bhp at 5,400 rpm
Max torque:	150 lb-ft at 3,750 rpm
Weight:	3,200 lbs.
Gas mileage:	25 mpg
Price:	\$15,470

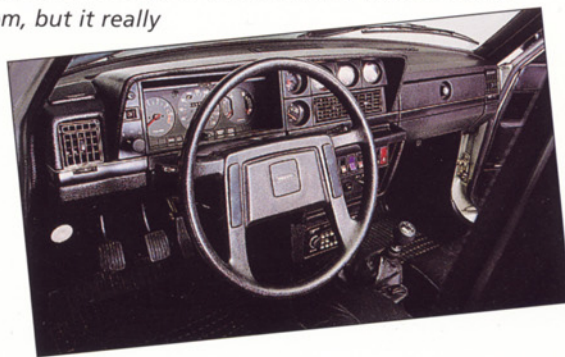
**BEHIND THE WHEEL**

*"...excellent power."*

*"Volvo did a good job with the turbo conversion. It is tuned to give excellent power and torque from very low rpm, masking any turbo lag."*

*Boost comes in from as low as 1,500 rpm, but it really gets going around 3,300 rpm. The chassis is capable of handling the additional power. It's stiff enough to resist roll through fast corners, is stable at high speed and comfortable despite the uprated shock."*

*The instrument panel retains the feel of a standard 240, but with an added boost gauge.*





# Volvo 240 GLT TURBO



There was little Volvo could do to make the 240 look like a performance car apart from using the basic shell and fitting it with smarter alloy wheels and lower-profile, higher-performance tires.

## Four-cylinder engine

Adding a turbocharger drastically increased the power output of the Volvo 2.1-liter, four-cylinder, overhead-cam engine. In U.S. form the Turbo version gives 127 bhp and 150 lb-ft of torque.



## Strut front suspension

The original 240 used MacPherson struts for the front suspension. This was retained for the Turbo but with a thicker anti-roll bar and gas-pressurized shock absorbers.

## Front air dam

The 240 first featured a front air dam in 1978, when the GT was launched. This was continued on the lower-powered models to help stability. It was especially needed in the GLT Turbo models.

## Live rear axle

The live rear axle is typical for a 1970s Volvo. Trailing links and a Panhard rod were added, as were De Carbon shocks and a thicker anti-roll bar.







### Overdrive

When the GLT Turbo was built, Volvo was using a four-speed manual with a separate overdrive unit. The transmission was modified for the Turbo, with a lower first-gear and a higher final-drive ratio.



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### Garrett turbocharger

Volvo fitted a Garrett AiResearch BT03 to the GLT Turbo. Although it could run with a carburetor, Volvo used electronic fuel injection. Later, an intercooler was added to increase power and to lower intake air temperatures.



# Specifications

## 1983 Volvo 240 GLT Turbo

### ENGINE

**Type:** In-line four-cylinder

**Construction:** Cast-iron block and alloy head

**Valve gear:** Two valves per cylinder operated by a single belt-driven overhead camshaft

**Bore and stroke:** 3.62 in. x 3.15 in.

**Displacement:** 2,127 cc

**Compression ratio:** 7.5:1

**Induction system:** Fuel injection with Garrett AiResearch BT03 turbocharger

**Maximum power:** 127 bhp at 5,400 rpm

**Maximum torque:** 150 lb-ft at 3,750 rpm

### TRANSMISSION

Four-speed manual with overdrive

### BODY/CHASSIS

Unitary monocoque construction with steel two-door sedan body

### SPECIAL FEATURES



The 240 GLT was the first Volvo to be fitted with a turbocharger.



An external power jack can be used to run camping equipment.

### RUNNING GEAR

**Steering:** Rack-and-pinion

**Front suspension:** MacPherson struts with lower control arms, telescopic shock absorbers, and anti-roll bar

**Rear suspension:** Live axle with trailing arms, Panhard rod, coil springs, telescopic shock absorbers, and anti-roll bar

**Brakes:** Vented discs, 10.3-in. dia. (front), solid discs, 11.0-in. dia. (rear)

**Wheels:** Alloy, 14-in. dia.

**Tires:** 185/60 HR14

### DIMENSIONS

**Length:** 192.5 in.    **Width:** 67.3 in.

**Height:** 56.3 in.    **Wheelbase:** 104.3 in.

**Track:** 56.3 in. (front), 53.5 in. (rear)

**Weight:** 3,200 lbs.



# Milestones

**1974 Volvo launches the 240.** It remains in production for the next 20 years.



In Touring Car racing, the 240 was dominant in 1983-1984.

**1981 Following the 240 GT,** Volvo fits a turbo to the 2.1-liter engine to create its most powerful road car, the 240 GLT Turbo.



Volvo's 850 T-5 is a spiritual successor to the 240 Turbo.

**1984 Ulf Granberg and Robert Kvist** drive the 240 Turbo to its first win in the European Touring Car Championship.

**1985 An 'Evolution' 240 with** a larger turbo and intercooler is raced despite arguments over its homologation. It wins four races including Anderstorp in Sweden.

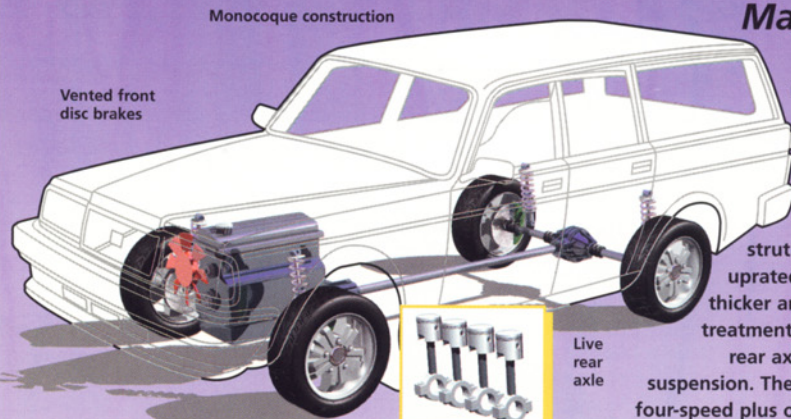
**1986 Production of the 240 GLT Turbo** comes to an end.

## VALUE GUIDE

ORIGINAL PRICE	
1982	\$15,470
CURRENT VALUE	
	\$5,500

Lack of style, if not performance, hampers its collectibility.

## UNDER THE SKIN



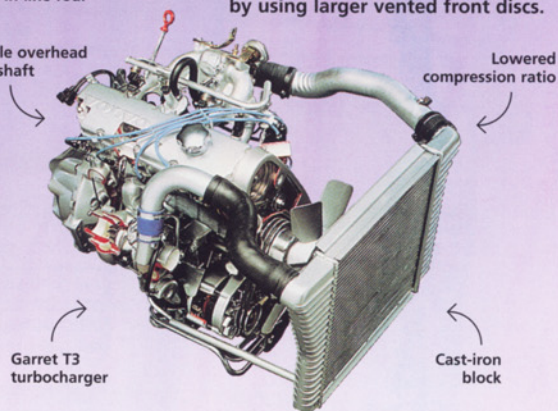
### THE POWER PACK

#### Upgraded for power

Volvo's four-cylinder engines were known for their strength, but the short-stroke, 2.1-liter four had to be modified for its turbocharged conversion. The compression ratio was lowered from 9.3:1 to 7.5:1 to allow for the boost, and the exhaust valves were upgraded with sodium-filled stems (like high-performance Italian engines) to reduce valve train weight, along with harder stellate valve seats. The engine retained the same iron block and alloy head with two valves per cylinder operated by a single belt-driven overhead camshaft.

Solid in-line four

Single overhead camshaft



Garret T3 turbocharger

### Major changes

The 240 underwent a number of changes to turn it into a high-performance turbo car. The monocoque body was unaltered, but the MacPherson-strut front suspension was upgraded with gas shocks and thicker anti-roll bars. The same treatment was given to the live rear axle with its coil-sprung suspension. The first gear ratio in the four-speed plus overdrive transmission was changed, and the braking upgraded by using larger vented front discs.


### Pace and space

Volvo saw no reason why its traditional station wagon customers should not have the same excitement that the Turbo sedan offered. So it produced a load-carrying version that handled and performed extremely well.



The Turbo was built as a sedan and a wagon.

## NOSE TO NOSE

TOP SPEED	0-60 mph	POWER	WEIGHT	RIVAL CARS
137 mph	6.8 sec.	190 bhp	3,380 lbs.	 FORD THUNDERBIRD TURBO COUPE
131 mph	7.5 sec.	175 bhp	2,833 lbs.	 SAAB 900 TURBO
107 mph	8.9 sec.	127 bhp	3,200 lbs.	 VOLVO 240 GLT TURBO

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