

Volvo 1800 and Smiths Tachometers Models

Tachometers Used in Volvo P1800, P1800S, 1800S, 1800E and 1800ES model range 1961 - 1973.

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Artwork and Layout by Warren Townsend - Melbourne Australia © May 2022

Volvo 1800		Tachometer Model		
Model	CH#	Ch #	Engine Type (Part #)	
P1800	MY61 A	1	1	61-63 Jensen B18B 1 (496800) Smiths RV 1310/00 6K Redline
	MY62 A			Remote Rev Counter Unit
	MY63 A	6000	6000	B18B 1 (496800) B18B 2 (496812)
P1800S	MY63 B	6001	6001	B18B 2 (496812) & (496817) Smiths RV 1310/02 6.5K Redline
		8000		Remote Rev Counter Unit
1800S				
1800S	MY64 D	8001		
			9882	
			9883	
			9884	B18B 2 (496812) & (496817) Smiths RVI 3410/00 6.5K Redline
			9885	
			9886	Rev Counter Loop on Tach
			9887	
			9888	B18B 2 (496812) & (496817) Smiths RV 1310/02 6.5K Redline
			9894	Remote Rev Counter Unit
			9895 ?	Excluded from Tach Info in Parts Books
			9896	
				B18B 2 (496812) & (496817) Smiths RV 1310/02 6.5K Redline
			9904	Remote Rev Counter Unit
			9905	
			9906	B18B 2 (496812) & (496817) Smiths RVI 3410/00 6.5K Redline
			9907	
			9908	Rev Counter Loop on Tach
			9909	
			9910	
			9911	
			9912	B18B 2 (496812) & (496817) Smiths RVI 1310/02 6.5K Redline
			9940	Remote Rev Counter Unit
			9941 *	

SMITHS RV 13100/00
Volvo Part # 668370 Swedish Text, #665257 English Text

Gauge gets signal from a Remote Rev Counter Unit

80 mm Diameter Gauge
Warning Zone at 5.5k RPM
Redline from 6.0k RPM

Remote Rev Counter Unit
Ignition Voltage Sensor unit, fitted near the horns in front of the radiator. Tachometer gauge responds to signals from this unit.

SMITHS RV 13100/02
Volvo Part # 668371

Gauge gets signal from a Remote Rev Counter Unit

Introduced after B18B 2 Engine 496812 which allowed higher revs with new Valve Springs.

80 mm Diameter Gauge
Warning Zone at 6.0k RPM
Redline from 6.5k RPM

Remote Rev Counter Unit

Colour Code : Tachometer Model

SMITHS RV 13100/00
SMITHS RV 13100/02
SMITHS RVI 3410/00
SMITHS RVI 3410/00A
SMITHS RVI 3412/00

9941 * Probable typo "9441" in Parts Book - 9441 is listed for introduction of new RVI 3410/00 - part # 670580, but close reading indicates it was actually 9941.

● Colour Dots indicate "original" cars with evidence of Tach Model installed - these cars comply with Parts Book info - Dot colour indicates Tach Model & positioned by Ch #

⊙ Colour Dots with ? indicate "original" cars and Tach Model used, but these cars had an unexpected Tach Model - there is a possibility of a replacement part fitted early in car's life, so original Tach status unclear without more evidence. These examples highlight the difficulty of verifying "originality" in cars over 50 or 60 years old.

Volvo 1800 and Smiths Tachometers Models

Volvo 1800		Tachometer Model	
Model	CH #	Ch #	Engine Type (Part #)
1800S	MY64 D	9941 *	Continued B18B 2 (496812) & (496817) Smiths RVI 3410/00 6.5K Redline Rev Counter Loop on Tach
		9999 *	
		10000	
		12500	
1800S	MY65 E	12501	
		16500	
1800S	MY66 F	16501	Tach Change * B18B 3 (496819) Smiths RVI 3410/00A 6.5K Redline Rev Counter Loop on Tach
		21000	
1800S	MY67 M	21001	B18B 3 (496842) & (496864) Smiths RVI 3410/00A 6.5K Redline Rev Counter Loop on Tach
		25500	
1800S	MY68 P	25501	
		28300	
1800S	MY69 S	28301	B20B (496922) & (496923) Smiths RVI 3410/00A 6.5K Redline Rev Counter Loop on Tach
		29993	30000
1800E	MY70 T	29994	30001
		32792	
1800E	MY71 U	32793	B20E Smiths RVI 3412/00 Internal Rev Counter
		37542	
1800E	MY72 W	37543	B20F B20E
		39414	39414
1800ES	MY72 W	1	1
		3070	
1800ES	MY73 Y	3071	B20F Smiths RVI 3412/00 Internal Rev Counter
		8078	8078

As can be seen from the chart, the installed Smiths Tachometer models changed back and forth a few times during MY64 year, in small batches, 5 cars with 3410/00, then 16 with previous model, then 7 cars with 3410/00, then 28 cars with previous model. A difficult production schedule as the new model Tach would require a completely different wiring harness. The RVI 3410/00 Tachometer finally became standard installation from Chassis # 9941. The Parts Books lists the last Remote Sensor Unit at Ch # 9999 *, but that appears to have occurred at Ch # 9940 with the new Tach Model (without Remote Sensor) installed from Ch # 9941.

This document began with initial work by JG Coutts - investigating anomalies in accepted history of Tachometers in Volvo 1800's. This document draws on technical work by R Kwas (sw-em.com), J Knapp (v1800.org) and "A Gentleman's Guide to Smiths Electronic Tachometers" by Alex Miller and has been aided by evidence submitted by members of the Classic Volvo Community. For technical information on Smiths Tachometers the above listed technical resources would be highly recommended.

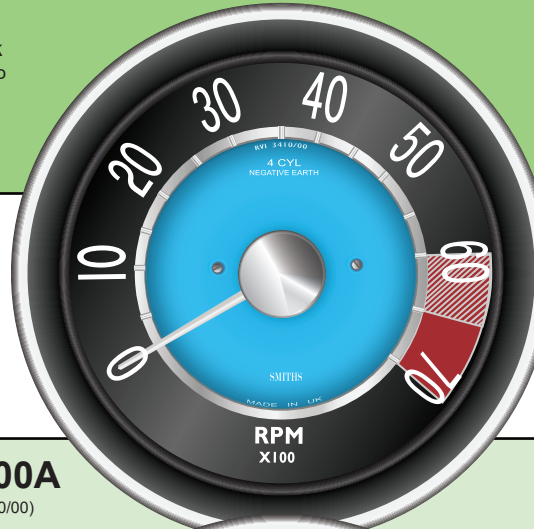
This document is intended as an information and historical source for clearly identifying instruments fitted to Volvo 1800 cars across the model range.

SMITHS RVI 3410/00

Volvo Part # 670580

Gauge gets signal through a current sensing loop on the back
White wire from Coil/Distributor looped to induce electrical signal for gauge.

80 mm Diameter Gauge
Warning Zone at 6.0k RPM
Redline from 6.5k RPM



SMITHS RVI 3410/00A

Volvo Part # 670580 (same as RVI 3410/00)

No external difference apart from Model #.
Some examples have a rubber plug and hole to allow adjustment without removing the case.

Tach Change * Unclear exactly when /00A was introduced, possibly from MY66 with a new engine but it could have been during MY65.



SMITHS RVI 3412/00

Volvo Part # 682159

Sensing of Current Pulse is internal to gauge
Red wire from Coil, White from Distributor with unique connectors to maintain polarity.

Rubber plug, or Guarantee Sticker, over hole in case - to allow adjustment without removing case.

80 mm Diameter Gauge
Warning Zone at 6.0k RPM
Redline from 6.5k RPM

