Tachometer in Volvo Amazon

When the top of the line model 123GT was introduced in the summer of 1966 (model year 1967) it came with a tachometer. This was assigned part number 281046 and was manufactured by Smiths for Volvo. The tachometer is transistorized and features a warning field for excessive engine speeds. Its placement on the dash pad is best illustrated by a picture (see below). The same tachometer was later sold as an accessory to Volvo Amazon, and is included in an accessories catalogue printed in June 1967 (RK 2711).

Smiths’ revolution counter on foot has five cables: one black, two red and two white. Install the unit by connecting the black to ground. One of the two red cables is connected to the instrument lights on the back of the light switch (connection 58b or, if you prefer, 58a which is the rheostat of the instrument lights) and the other red cable to the 25A fuse (the upper, bolder and shorter fuse in the fuse box). One white cable is connected on the coil instead of the black (which is removed) and the other white cable is connected to the distributor (where the just removed black cable was). If the tachometer doesn’t work, switch the two white cables.

On cars with electronic ignition system (for instance 123IGNITION) the tachometer is connected with the two white cables in series between the ground cable of the coil (usually black) and the minus on the distributor. The Smiths tachometer works fine with 123IGNITION. For other models, companies like JDO-instruments (www.jod1.com) and CASU (www.casu.nl) offer rebuilds of the Smiths tachometer to work with electronic ignition systems.
The Smiths tachometer that came factory installed on the 123GT model year 1967 has a chrome ring, red needle and a $10 \times 100$ RPM scale. This was changed with the model year 1968 and the unit now had a silver ring (non-reflecting), white needle and a $1 \times 1000$ RPM scale. However, both have the same part number, 281046, and the latter was sold as accessory from 1969. The picture to the left is from the 1969 accessories catalogue and, mistakenly, shows the 1967 tachometer.

Instruments mounted on top of the dash pad were later prohibited in several countries due to safety reasons. In Sweden they are not allowed on cars registered for traffic after January 1st, 1970.

Waiver. The text in this summary has been prepared with utmost care but is, despite of this, strictly a guide to be used in conjunction with normal and cautious vehicle shop practice, including the safe operation of electric equipment. I cannot accept liability for your actions. Work smart! Work safely!