

# Sender for tachometer in our P1800 with Smith instrument.

Smith gen1 RV1310/00

## Introduction

All in all, our tachometer does not work or they show the wrong speed. Instead of rebuilding the instrument, this kit is supposed to be able to be mounted without affecting the original. You can let the original transmitter stay in front and have this hidden under the dashboard and no one will see any difference from the original.

## Installation

step 1: Always be safe and start by loosening the battery terminal.

Step 2: First we will disconnect the original transmitter that sits in the front inside the grill. Loosen the grill and identify the transmitter with three cables with flat connectors. Loosen the white/black wire that comes from the ignition coil and the Black/Brown cable that comes from the tachometer. Connect these cables with the supplied jumper. There is very important to secure that there are no possibilities to shortcut the connectors to ground.

Step 3: Now we're going to hook up the new transmitter under the dashboard. Loosen the brown/black wire on the tachometer which comes from the old transmitter. It is the pin that are to the right in the direction of the car and marked with a "+". Attach the brown cable at new transmitter to the instrument and the orange (in some cases purple) to which were loosen from the tachometer. There is very important to secure that there are no possibilities to shortcut this cable to ground. The white is + 12v supply and is ready to be connected on the ignition lock indicator pin together with the other white wires. The black cable is connected to earth together with the backlight in the tachometer. Then attach the box under the dashboard. But wait until you made eventually fine-tuning.

Now it should work as soon as the battery is connected and the engine is running.

## Fine-tuning

Since all instruments are + 50 year the calibration can have been changed, the instrument according to the service booklet view 2800 rpm at a feed with 10mA. It is possible to calibrate if you open up the revolution counter and adjust, but that's what we should avoid with this device.

Carefully open the box at the short end where the cables comes out. Pass on the small screws, they are hard to find again. Pull out the circuit board so you can see the two rotary potentiometers.

Then we are ready to adjust the pointer. If the instrument shows too much at idle then adjust the potentiometer to the left. It needed only very little, so pass on. Idlingspeed can be good to compare with a control instrument. Ignition adjustment tool or cam shaft angle tool usualy have the tachometer functions, at least up to 2000 RPM.

Higher engine speed is adjusted with the potentiometer on the right. At a speed of 100km/h, with 4.10 rear axle gear and with 4th gear to be 3400rpm and with 4:56 gear ratio it should be 3800rpm.

If a lot of adjustment are needed the both left and right potentiometers need to be adjusted alternately.

Good luck!

