

Volvo 240 Tachometer and Small Clock Installation

1981-93 Models

By Dave Barton

BEFORE STARTING ANYTHING... READ ALL OF THESE INSTRUCTIONS.

These instructions will explain how to remove the large clock in your main instrument pod and install a Volvo optional tachometer in its place. It will also explain the installation of the small (52 mm) accessory clock in the accessory position to the right of the main instrument pod.

Recommended List of Tools: Medium flat screwdriver. Medium Phillips head screwdriver. T-25 Torx driver for some later models

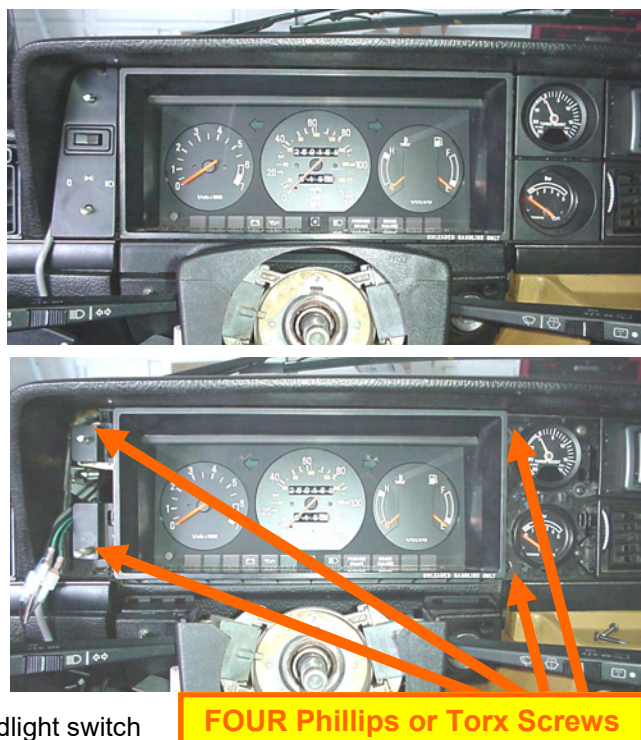
Step 1: Removing the Main Instrument Gauge Pod

First, you will need to remove your main gauge pod. It is a very simple procedure. **The photo below shows the steering wheel removed. This was done for photo purposes and is not required, but it does make the work easier.**

If you have a 1981 through 1985 240, you will need to disconnect the speedometer cable from the back of the speedometer. If you have an '86 and later car, you have an electronic speedometer and do not have a cable attached to the back. There will be an electrical plug to disconnect. This can be done after you pull the gauge pod out of the dash a little bit.

1981-1985 models: To remove the speedo cable, look under the dash area and remove the plastic fasteners that hold the black cloth cover under the dash. There should also be a fat rubber band around the heater vent... remove it also. Now lower the cloth cover. You may now reach up to the back of the speedo and find a plastic retainer on the cable end that attaches to the speedo. This retainer needs to be twisted approximately 90 degrees counter-clockwise to release the cable. Now the cable may be pulled free from the speedo. **NOTE:** If you have trouble twisting the retainer, there may be a larger plastic "anti-tamper" collar on the speedometer back around the retainer. This collar may be pried off with a screwdriver and discarded.

Later Models: There may be a plastic "anti-tamper" cover that makes it difficult to unplug the electrical speedo connector. It too, may be pried off (this may be done after you pull the gauge pack out a few inches).



Now you can concentrate on the front of the dash. Pull off the headlight switch knob and the dash light dimmer knob. With a flat screwdriver, gently pry the black plastic trim pieces that fit around the 2 inch gauges to the right. Some cars do not have these gauges, the square plastic pieces remove the same way. Then pry off the plastic cover to the left, where the headlight switch is. If the cover is connected to an auxiliary switch (i.e.: fog lights), there is no need to unplug it as long as you can let it hang down, out of the way.

By removing these plastic pieces, you have exposed four Phillips screws that hold the gauge pack (four T-25 Torx screws for some later cars). Remove these screws and pull out the black aluminum brace on the left near the headlight switch.

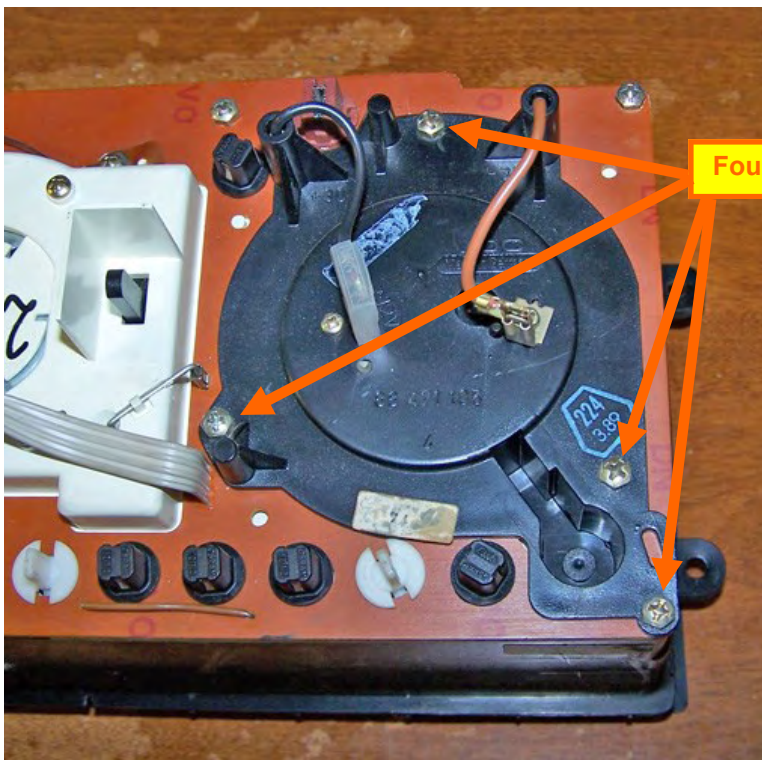
Also remove the plastic cover on top of the steering column that covers the turn signal and wiper controls. There are two Phillips screws on top that hold it (two T-25 Torx screws for some later cars).

Now the gauge pod may be gently pulled toward you. Pull it out enough so you can see the wire plug connections on the back. **Take note of each connection so you will remember exactly where they go.** Write it down or take photos. Now disconnect the wire connections. On some models, there will be a smaller second speedo cable to disconnect. To disconnect this cable, simply turn the collar counter-clockwise until it is free. This cable goes from the speedo head to the "Sond" switch, which is there to turn on a dash light to remind you to return to Volvo so they can service your oxygen sensor at periodic mileage intervals.

It is recommended that you wash your messy hands before handling any internal parts of the gauge pod.

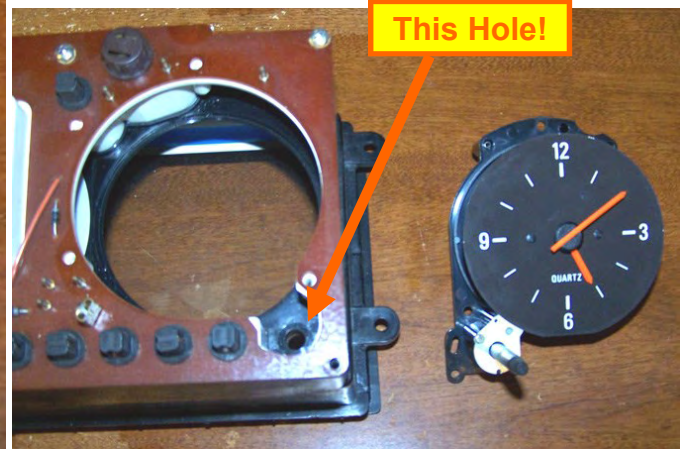
Step 2: Removing Large Clock from Gauge Pod

Now turn the gauge pod over and observe the FOUR Phillips screws around the back side of the clock. Removing these screws will allow you to lift the clock up and out of the box. A little gentle prying under the edge of the black plastic with a flat screwdriver will help if it's tight.



Four Phillips Screws

With the clock out of the box, please pay attention to the HOLE in this photo. This is where the clock adjust-



This Hole!

ing stem used to go, so that the clock could be adjusted from the front. You no longer need the hole, so it should be plugged. This is where this little item pictured below right will go. Place the plug into the hole, rubber end facing UP.

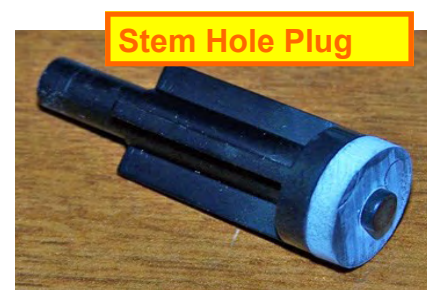


Replace Four Phillips Screws

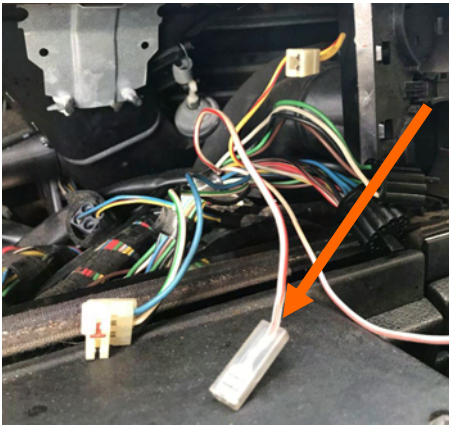
Now you can insert your new tachometer. Pay attention to the four metal electrical contact posts, which must line up and go into the holes in the tachometer as you install it.

There is also a hole in the tachometer where this plug goes into.

Once the new tach is pushed one all the way down into position, replace the four screws.

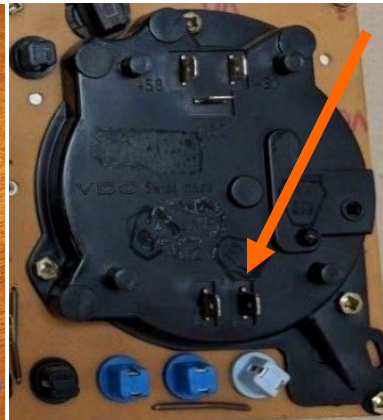
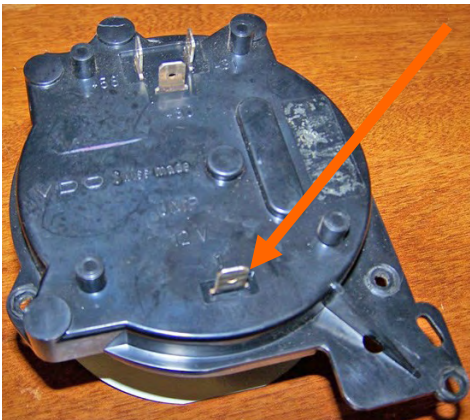


Stem Hole Plug



Before you reinstall the gauge cluster, locate the tachometer signal wire. It will be a **RED/WHITE WIRE** with a FEMALE connector with a clear or white plastic insulator. It will be somewhere in the mess of wires behind the cluster. 1981 and later 240s have this wire for use with an optional tachometer. This wire brings the signal from the negative side of the ignition coil to the tachometer.

This **RED/WHITE WIRE** goes to this connection below on your new tachometer. Early tachs will have one spade. Later tachs will have two. Either will work.

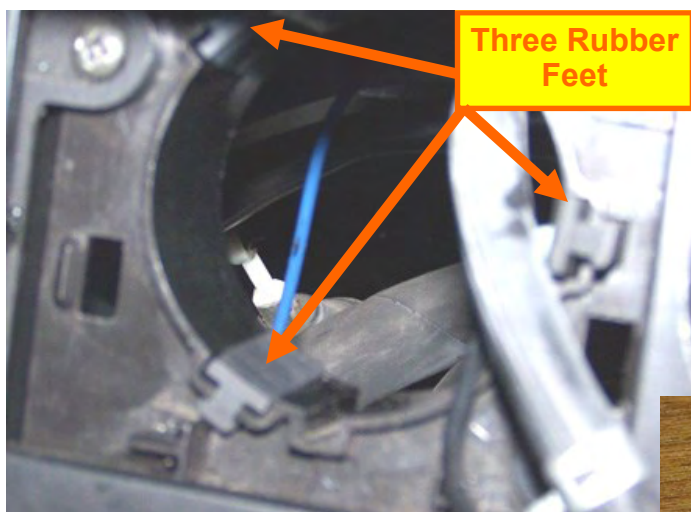


CAUTION: Do NOT accidentally plug the tach wire into one of the three upper spades. That can permanently damage your circuit board.

Now it's time to hook up the small clock (if you are using one). See that wire harness attached to the rear of the clock? That harness needs to be slipped through the hole that you will be installing the clock into. This is usually the top hole, to the right of the main cluster, but it can go in either top or bottom. Then feed the harness over to the area behind the instrument cluster.

Now, before you insert the clock, first insert the three rubber feet into the slots around the hole. They should go in so that the "teeth" are angled toward the dash (away from you). These feet will grip the clock and hold it in place.

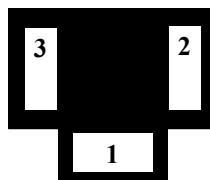
You may now insert the clock.



Finally, you may re-install the main cluster. Hopefully, you recall where the connections go. The final connections will be the single red and white wire (female plug) mentioned above, and the **THREE-WIRE PLUG** at the end of the clock harness, which connects to the back of the tach as shown below.

WIRE COLORS:

1. RED: to clock pos (+)
2. BLACK: to clock ground
3. GREEN: to clock light



View from REAR

