Removing Mercedes W123 Instrument Cluster

If your odometer stops working, your speedometer cable needs to be replaced, or other issues arise with your instrument cluster you will need to remove it before continuing with the work.

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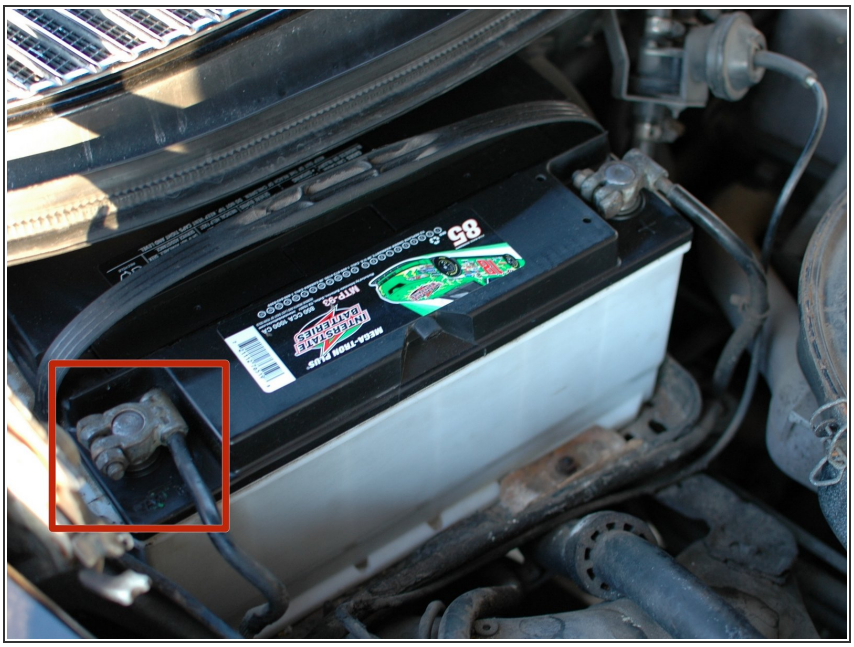
INTRODUCTION

There are a lot of important components in your instrument cluster, and it's only a matter of time before you'll need to pull it out to fix something. It's not such a daunting task, once you know a few tricks. This guide should help with this task.

TOOLS:

- 10mm Wrench (1)

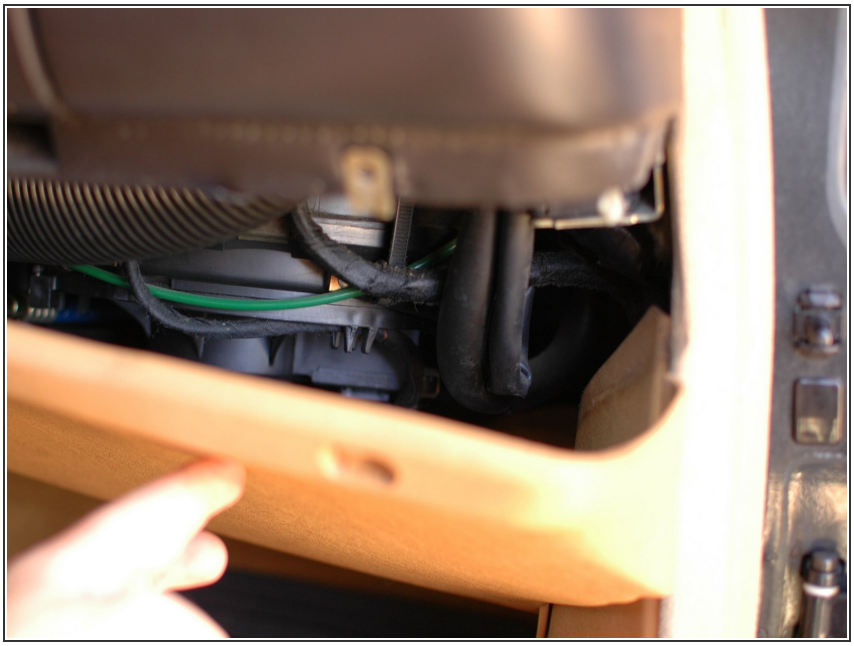
Step 1 — Instrument Cluster



- Begin by disconnecting your battery, pulling off the negative (-) ground cable.

⚠ This is required for this process! There is a constant 12v supply of power to your car's clock, even when the key is off. If you attempt to pull the cluster out with the battery connected you will burn up part of your cluster's circuit board, or worse yet hurt yourself.

Step 2



- Then remove the driver's side kick panel. See the kick panel removal guide for help with this task.

Step 3

- The cluster is held in by tension alone. There are no fasteners.
- Reach up under the dash, feel your way past any wires and/or sound insulating material until you can touch the back of the cluster. Then push it firmly outwards towards the steering wheel.

Step 4

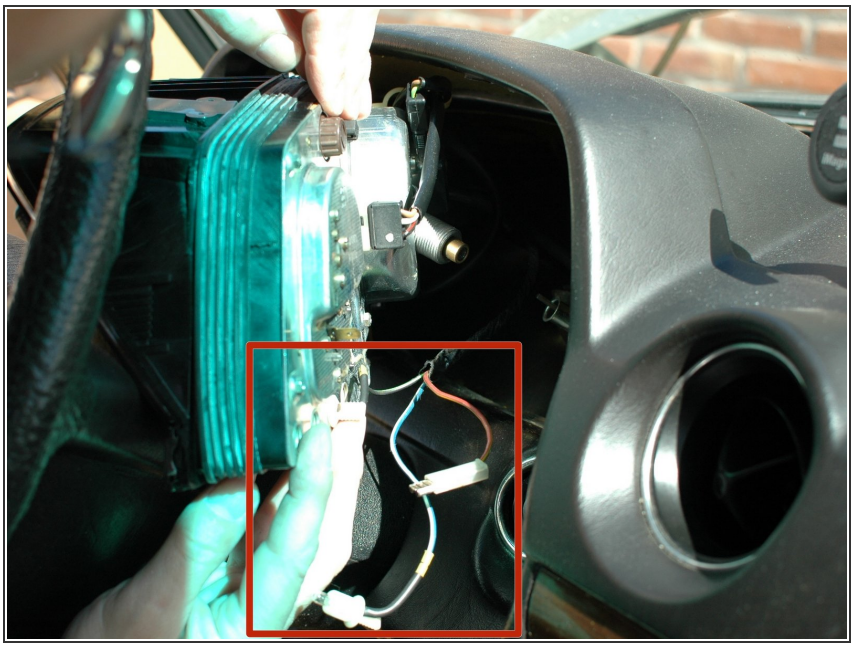
- Once the cluster starts to come out, you can pull it further out by the upper edge.

Step 5

- Pull the cluster out until you feel the tension of the speedometer cable.
- Normally, there will be just barely enough room for you to get your hand behind the cluster. You will need to feel around the center of the cluster, behind and to the right of the center of the speedometer cable, for the connection for the speedometer cable.
- The cable screws on to the back of the cluster with a knurled knob. It is to be loosened by hand. No tools will be necessary to unscrew this. Unscrew the cable until it is free of the cluster.

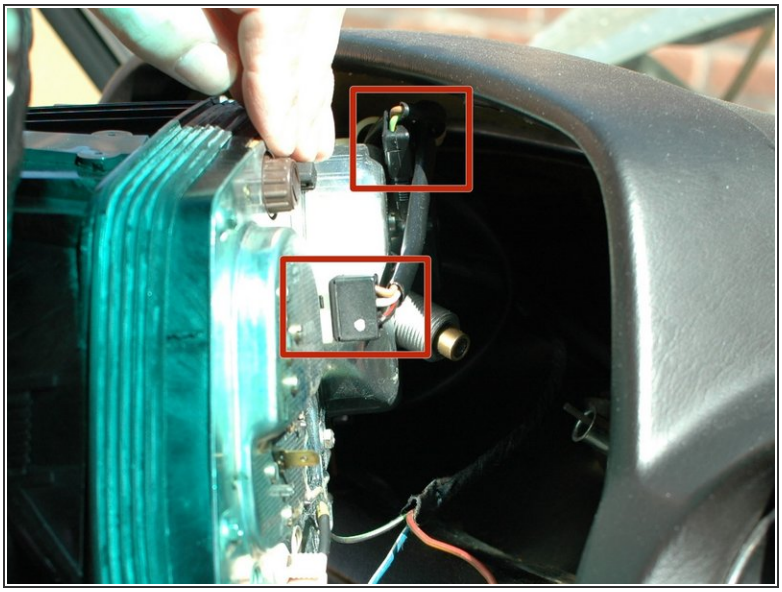
If your speedometer cable is especially taut behind the cluster, you may need to go back to step 2 and try to remove it by feel before pushing the cluster out by hand.

Step 6



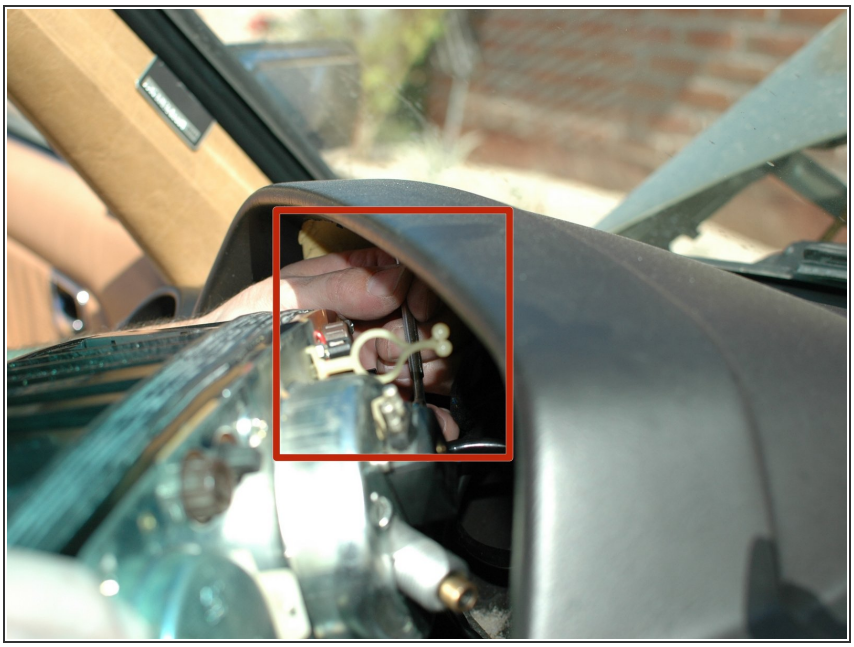
- With the speedometer cable disconnected you will be able to pull the cluster out further for more working room.
- Starting on the right side, begin disconnecting the items that attach to it.
- First, you will pull out any light bulbs that plug in to the right hand side of the cluster. On a diesel W123 this will include the glow plug bulb and seatbelt bulb. Then unplug the spade connector for the power supply to the clock.

Step 7



- Next, unplug the two small plugs near the middle of the cluster.

Step 8

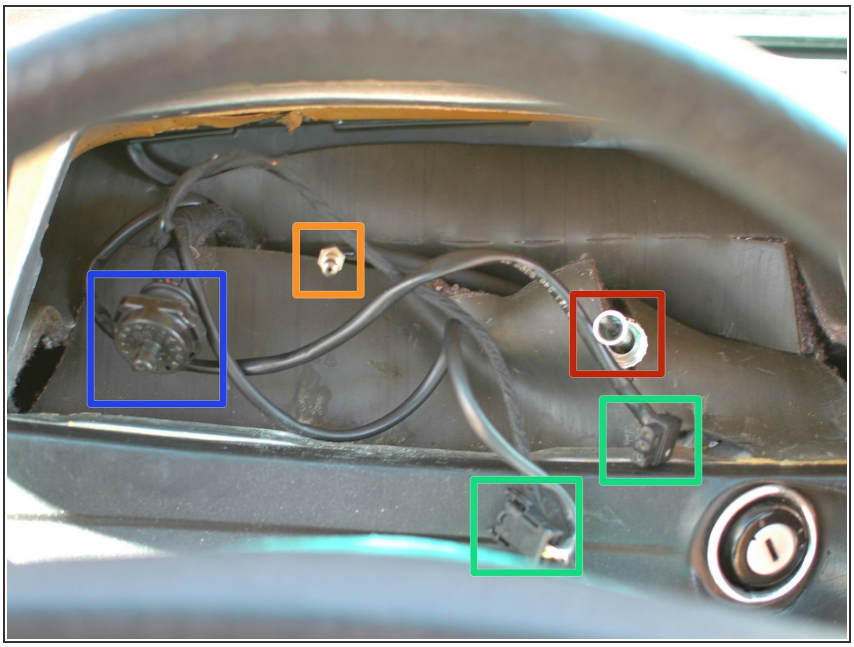


- Next, use a 10mm wrench to unscrew the oil line from the oil gauge.
- Lastly, unplug the large round plug on the far left of the cluster, down and to the left of the oil gauge fitting.

Step 9

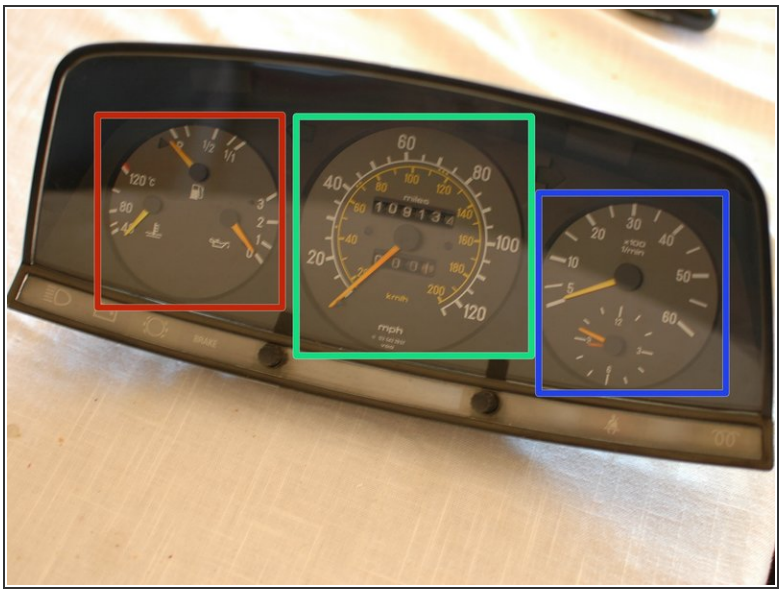
- With everything disconnected you can now remove the cluster, carefully working it up and out past the steering wheel.

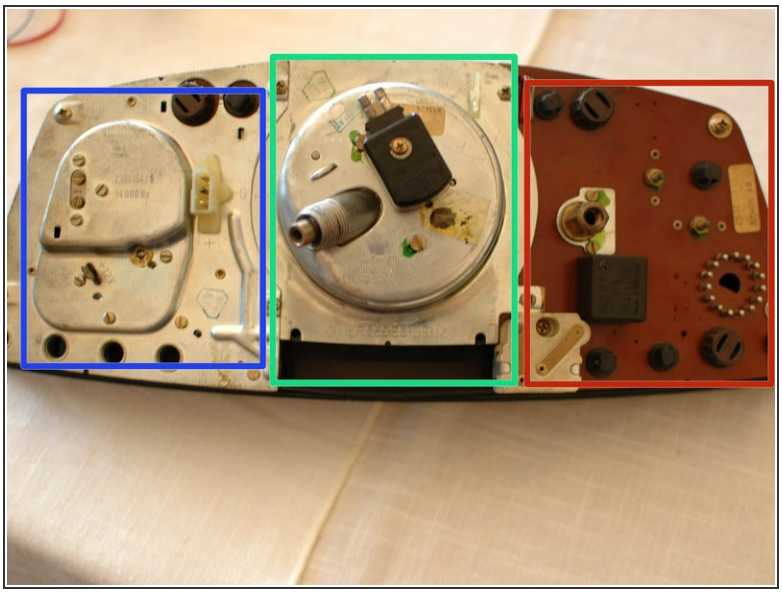
Step 10



- With the cluster removed on this car, let's take a second to identify some of the connections:
  - Speedometer cable
  - Oil line fitting
  - Small plugs for cluster accessories and lighting
  - Large primary plug
- Not pictured are the wires and bulbs for the glow plug and seat belt light, and the spade plug for the clock. Keep track of which bulb went in which socket - the wires will be different colors. On this car the wire for the seat belt light was green and the glow plug bulb wire was blue.

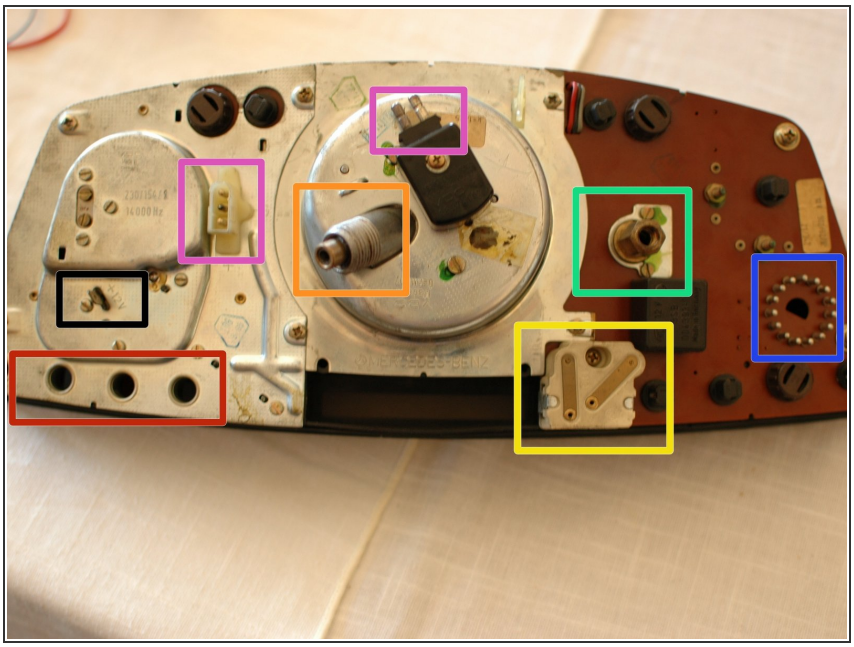
Step 11





- You can now take the cluster to your work bench to undertake whatever job you removed it for.
- Let's review the components, both front and back:
  - Oil pressure gauge, gas gauge, and engine temperature gauge
  - Speedometer, odometer and trip odometer
  - Tachometer and clock

Step 12



- And a bit more detail about the components on the back of the cluster:
  - Light bulb sockets (some are used, others are blanked out)
  - Speedometer cable connection
  - Rheostat (dimmer) control
  - Oil line connection
  - Clock spade connector (note +12v symbol, this is the constant 12v supply that can damage your cluster if battery is not disconnected)
  - Large primary cluster pins
  - Accessory plugs

To reassemble your device, follow these instructions in reverse order.