Replacing the Ignition Switch - Step by Step with Pictures.
http://forums.audiworld.com/showthread.php?p=18927576 (Corey 02ALMSTT)
(With updates/corrections by Dave F.) February 1, 2013 (I = Corey, mostly)

There was some debate whether or not there was a write up, with Pictures, for replacing the ignition switch.

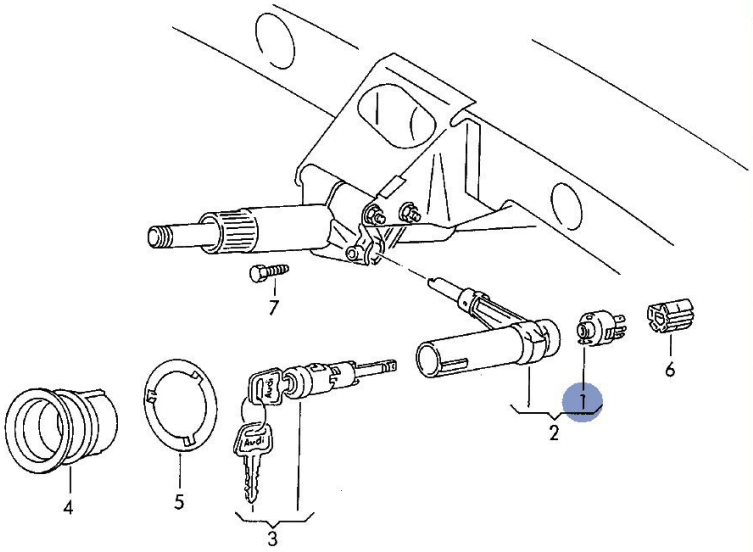
Since I found the Text Article very useful, I thought I'd put some Pictures to it and rework it a bit for future generations.

I'm referencing the How To by Franco Barber found here: Original How To and have done some direct copy and pasting where I could.

The Switch is obtainable at your local VW/Audi dealership, I paid $44 including tax. Part # 4A0 905 849B. DO NOT get the cheap white replacement on this one. Get the Genuine VW/Seat/Skoda/Audi part which should be black. Rumor has it that if you cheap out and get the white one, you'll be doing this procedure again in a year with another new switch. (There's a "once you go black," joke in there somewhere.)

Ok, here we go, Step by Step.

Dave F: What you are going to do is replace Item 1 PN 4A0905849B. Item 6 is the harness connector plug. Item 2 is the steering lock into which the switch is held so it can be activated by Item 3, the lock cylinder (and key)



POS	PART NUMBER	NAME	REMARKS	QTY	MODEL
		steering lock ignition starter switch			
1	4A0 905 849 B	ignition starter switch		1	
(2)	4A1 905 851	steering lock with ignition starter switch without lock cylinder	lhd	1	
(2)	4A1 905 851 C	steering lock with ignition starter switch without lock cylinder	lhd	1	automatic
2	4A0 905 851	steering lock with ignition starter switch without lock cylinder for height-adjustable steering column	lhd	1	
(2)	4A0 905 851 C	steering lock with ignition starter switch without lock cylinder for height-adjustable steering column	lhd	1	automatic
(2)	4A0 905 851	steering lock with ignition starter switch without lock cylinder	rhd	1	
(2)	4A2 905 851	steering lock with ignition starter switch without lock cylinder for height-adjustable steering column	rhd	1	
(2)	4A0 905 851 C	steering lock with ignition starter switch without lock cylinder	rhd	1	automatic
(2)	4A2 905 851 A	steering lock with ignition starter switch without lock cylinder for height-adjustable steering column	rhd	1	automatic

Step 1:
DISCONNECT THE BATTERY! Several very good reasons, I'll go into them later. Also make sure you have your Radio code if your stock radio requires it after loss of power. (Dave F.: Probably a good thing but I have done two switches without disconnecting the battery (YMMV))

Step 2:
You need to remove the Gauge Cluster. To do this Move the Steering Wheel all the way down, and out. Some people remove the Wheel, I didn't find it necessary. Put down a towel on top of the steering column to avoid scratches. (Dave F: Bentley says remove the steering wheel – however, with the tilt all the way down and the steering wheel released and pulled all the way out and relocked, this is absolutely unnecessary).

You remove the two screws from below the trim piece, then the screws holding the cluster into the dash it's self. Pulling the Cluster out of the dash has been described as a "Chinese Puzzle," Take your time. When it's out, rotate it forward and disconnect the plugs from the back and set it aside.

Whatever you do be careful of scraping the bottom of the cluster on the metal cluster mounts of the Dash. On the S6 cluster, there is an exposed Circuit board on the bottom of the cluster that YOU DO NOT WANT TO SCRAPE (not sure about the S4 cluster.) This is also a reason for disconnecting the Battery. If you bridge two solder lines of this exposed board on the metal you will totally Fubar your cluster. (There is power to the cluster even if the ignition switch is off.) If you smell burnt electrical components, it's too late.

DISCONNECT THE F'N BATTERY!

Dave F: Here are some instrument cluster removal photos from rmccomiskie's excellent Instrument Cluster Lamp Replacement post on the C4 100/A6 forum. This is a good time to replace the orange 1.2 W bulbs with the light green base 2W bulbs (follow the link to the lamp replacement DIY above).

Removing the lower instrument cluster trim piece (two screws and rotate out)

Photo Courtesy of **rmccomiskie** (1748)

Rotating the trim piece out left side first.

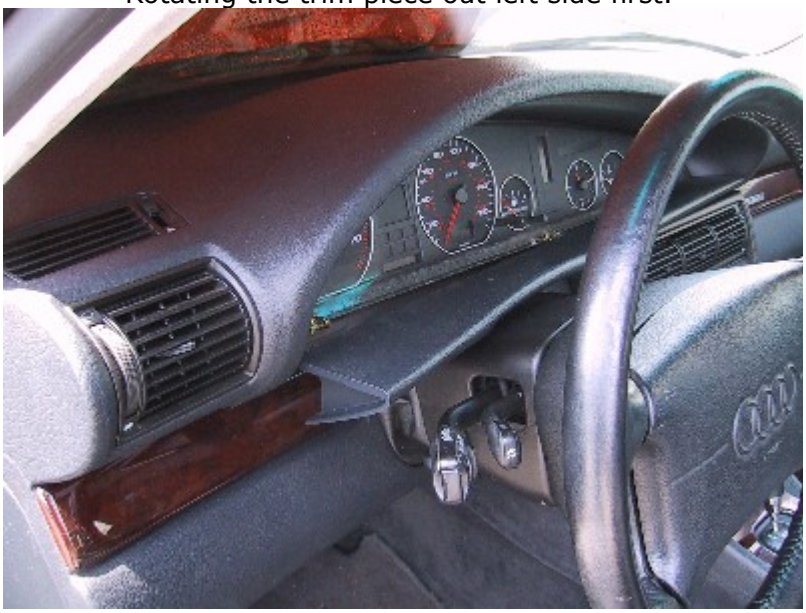


Photo Courtesy of **rmccomiskie** (1748)

Showing the pin at the right end of the lower instrument cluster trim piece

Photo Courtesy of **rmccomiskie** (1748)

Now you need to remove the three black wide-head Phillips screws at the bottom of the instrument cluster that are holding the cluster into the dash

Photo showing the location of the three black wide-head Phillips screws:

Photo Courtesy of **rmccomiskie** (1748)

After placing a towel on top of the steering column covers to prevent it from being scratched, this photo shows the process of pulling the instrument cluster out of the dash. Go slow and be gentle.

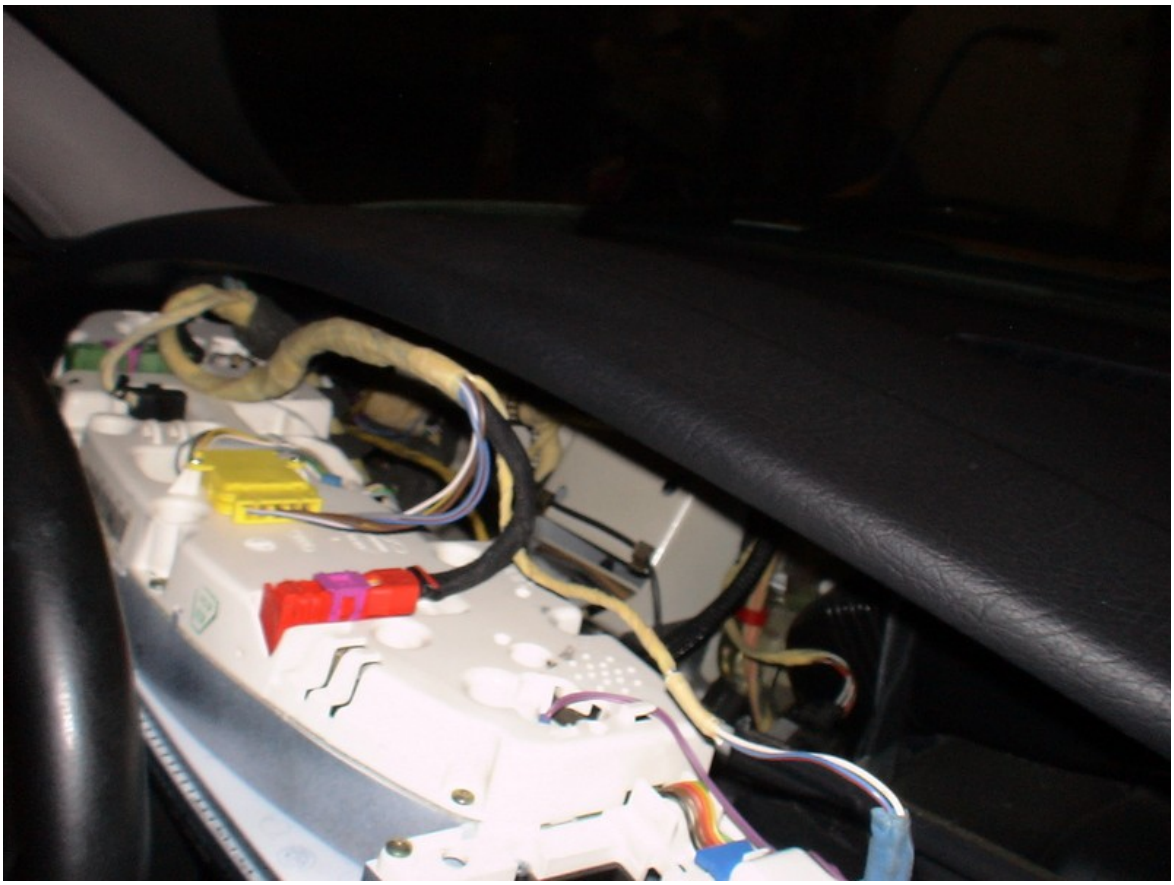
Photo Courtesy of **rmccomiskie** (1748)

Eventually you will be able to flip the cluster over as shown in the next photo.

Photo Courtesy of **rmccomiskie** (1748)

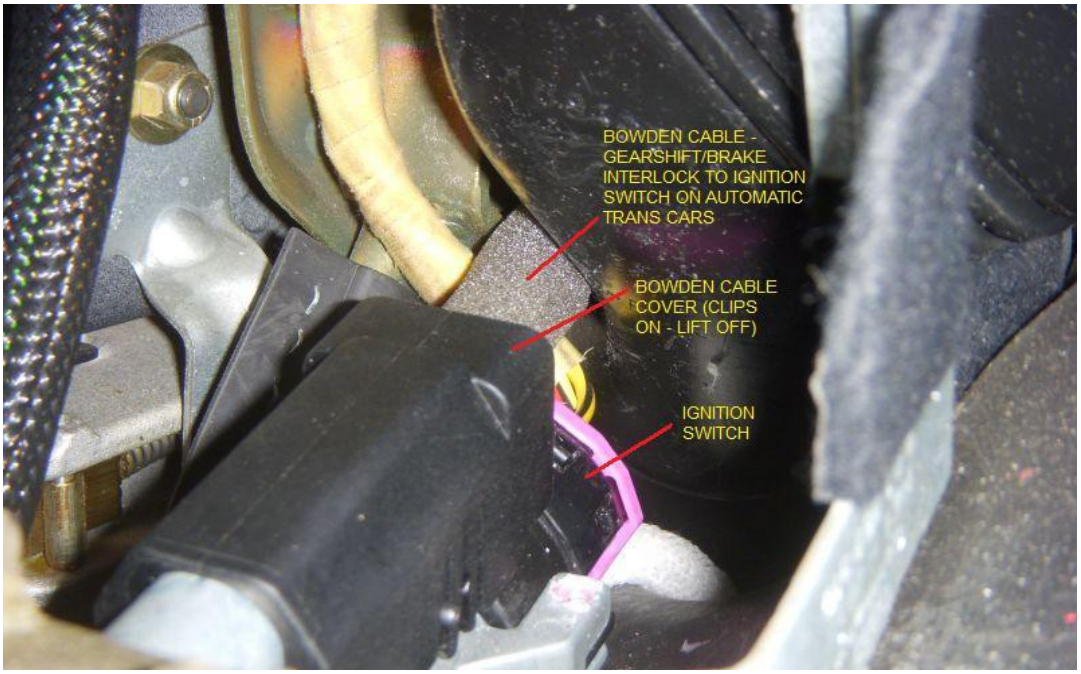
Make note of the orientation of all the connectors. Take a photo if necessary. It is important to reconnect everything properly when you put it all back together.

Back to Corey’s write-up:



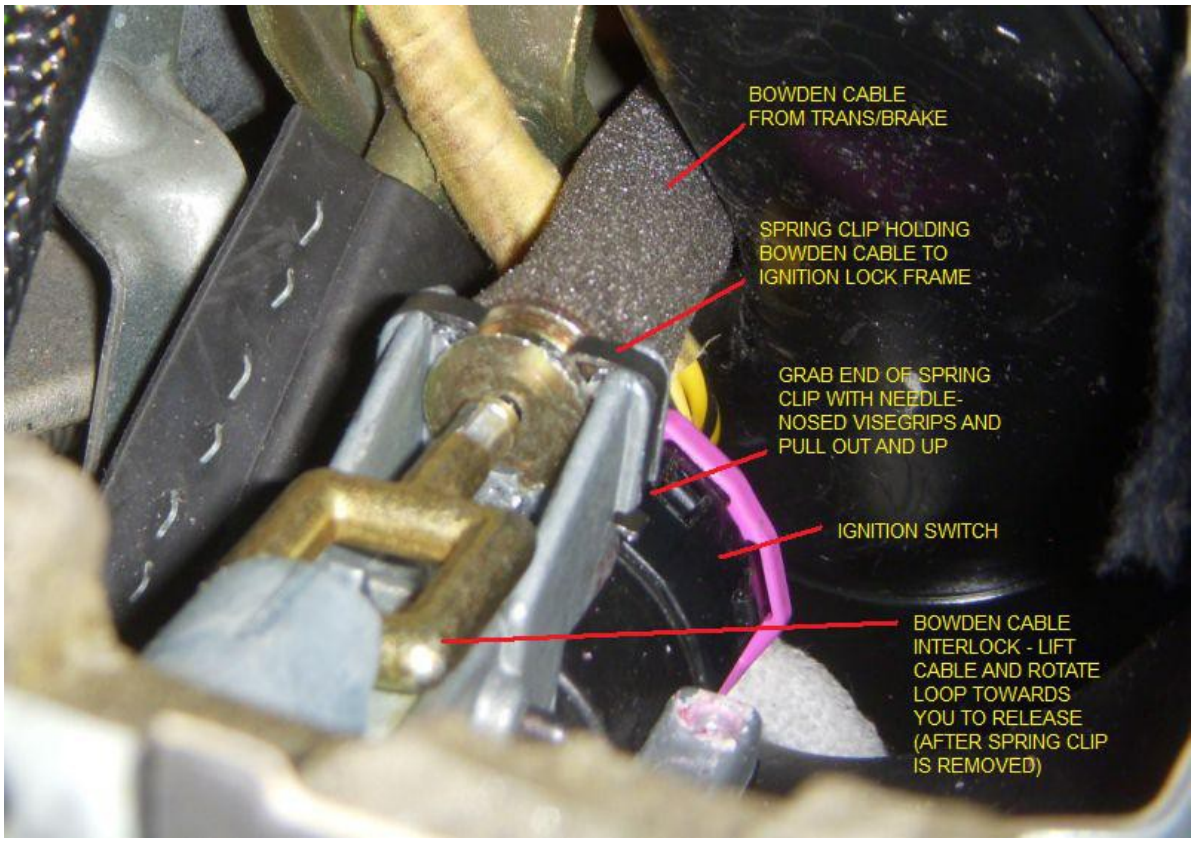
Step 3:
To the right of the ignition switch and up a little bit is a flasher relay mounted to a bracket, with a cable that runs back and connects to the same harness that the ignition switch connects to. Remove the flasher from its mounting bracket and move it out of the way. It just pops or slides out. I didn't disconnect the harness from the flasher, just got it out of the way. (Dave F: I know this wasn’t an issue on my 98 C4 A6 avant)

Dave F: If you have an automatic, e.g. C4 100/A6 (or UrS with autotrans) the next thing you will see is this:



Remove the black plastic cover over the Bowden cable interlock (lift and rotate away from the ignition switch)

For the automatic cars, you need to get the Bowden cable out of the way. To do this, you need to remove the spring clip holding the Bowden cable to the steering lock body. I (Dave F) used needle-nosed ViseGrips(tm) to grab the lower right ear of the spring clip and pull it out and up to get the spring clip started. It was a beotch. (During re-installing, I had to bend the spring clip back together to make both "ears" of the spring grab the steering lock body.)



Regardless of auto or manual transmission, you should now be able to see this:

Step 4:
I (Corey) removed the electrical Plug from the back of the switch before step 5. The reference article didn't do this; I just found it easier to get the switch out without the wiring harness there, as I have big hands.

I used a larger flathead screwdriver as a prybar. It popped right off with minimal effort. Since I had **THE BATTERY DISCONNECTED,** I didn't have to worry about welding myself or the screw driver to the dash. Which is always a nice thing.

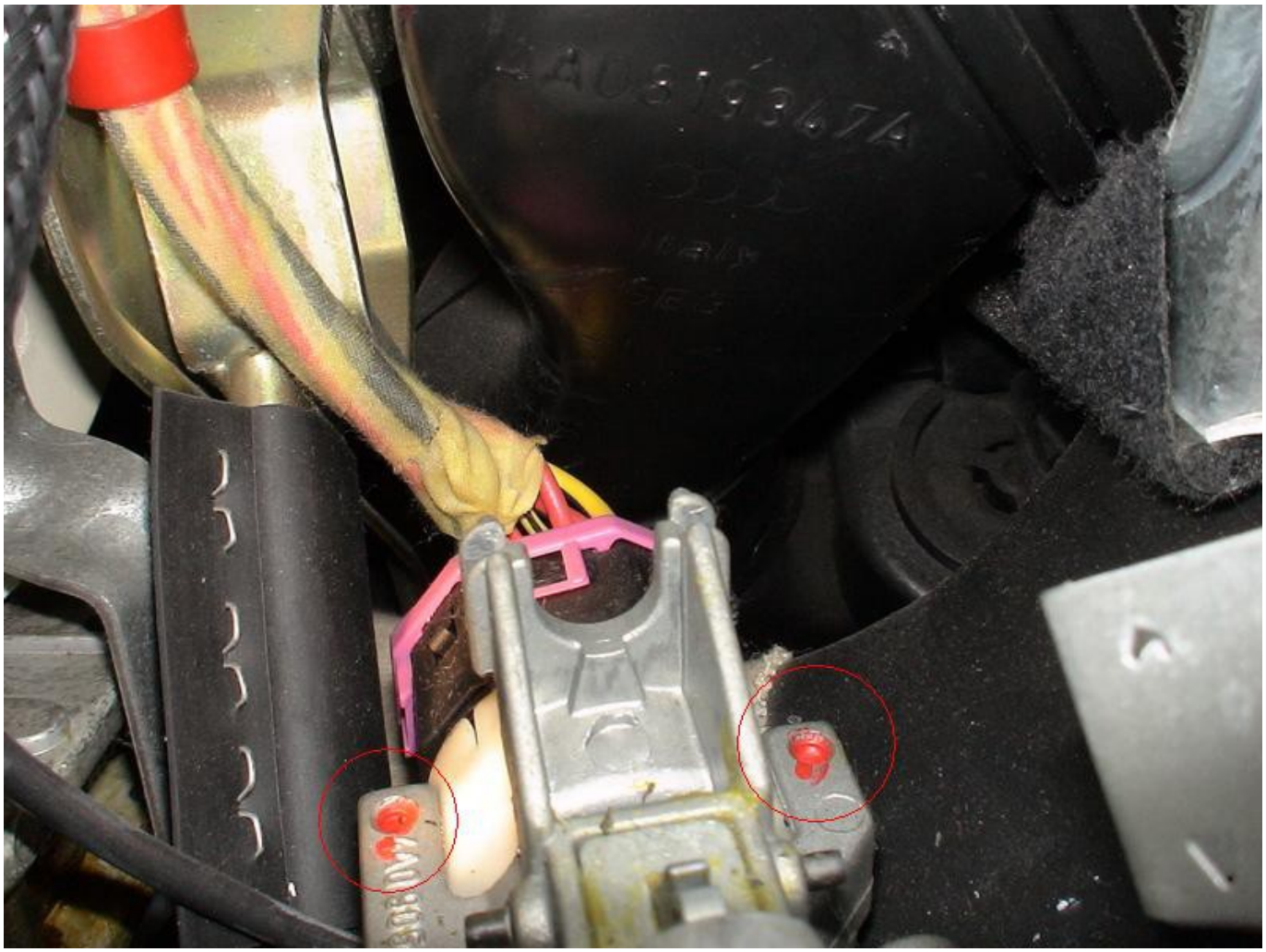
Step 5:
The switch is held in place by two set screws. You will need a **Very Small Flathead screw driver** for them. I used a 3mm electronics screw driver.

There is some red loc-tite that keeps them from vibrating loose. Have some loc-tite handy before you start so you can lock them down again after you're done.

(Dave F: This is NOT NOT NOT Loc-tite it is a lacquer paint intended to stop the screws from vibrating loose. It is NOT on the set-screw threads, just on top. If you put Loctite on the threads as Corey implies, you will have a beotch of a time the next time the ignition switch fails. DO NOT USE LOCTITE)

You don't have to completely remove the set screws to get the switch out. You can just back them out about 3-4 turns and still get the switch out. Press hard with the small screwdriver and turn to get through the Loc-tite.

The Switch will then slide backwards and you will be able to pull it out.



Here is the naughty broken switch: (Dave F: They can also fail less dramatically)

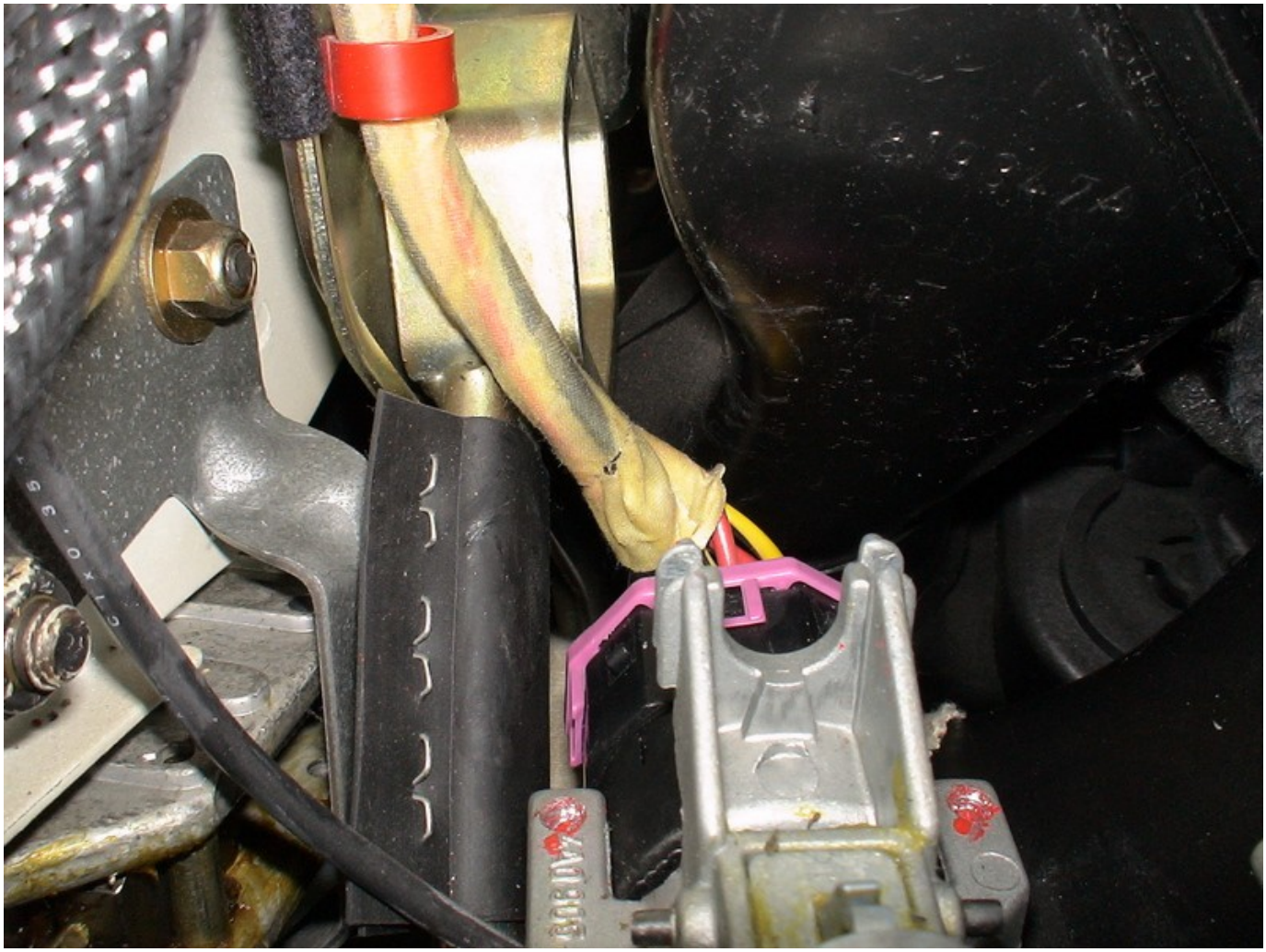
And here he's posing side by side for a picture with his much more well behaved and reliable replacement:

Step 6:
Getting the Plug / Wiring harness into the back of the switch was impossible when the new switch was mounted back in the dash first.

I ended up mating them, and then reinserting the whole thing into the bracket, then tightening the set screws. It's tight, but you can get it.

Get the set-screws tight. If you want, you can also use a small dab of enamel paint on the screws. (and no worry about sparks when mating the switch parts! Did I mention I disconnected the Battery?)

Note: no white switch anymore, just black!



Step 7:
Re-connect / Mount the flasher relay. Re-install the Bowden cable and cable cover on the autobox cars.

Step 8:
Re-connect the cluster and remount.

You will want to take the time to put some electrical tape or epoxy over the exposed circuit board on the Cluster. I also put electrical tape over the metal screw mounts and just ran the screws through it when I re-screwed in the cluster for future piece of mind.

This is also a good time to upgrade your dash lights to LED's or the 2W halogen version of the bulbs. You can get the LED's at Super Bright LED's Scroll down to Instrument Cluster LED's. There are several other online suppliers. Pick your favorite. You'll need 9 of them and I recommend red. LEDs are polarity sensitive, if you put one in and it doesn't light up, rotate it 180.

Summary:
That's pretty much it. Not a hard job, but it can be a bit of a tight squeeze on some of the manuvers required.

I'd rate it at the difficulty level of a single bloody knuckle and two beers for the frustration of getting the cluster out without fubaring it (Ask Weldon how much my replacement was.)

Total time was under an hour and a half including picture taking.

_____
Corey (and Dave F)