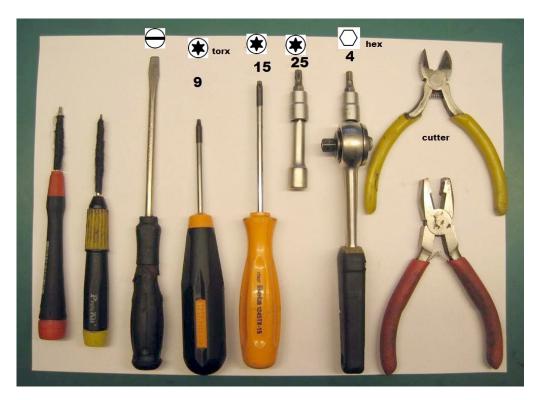
# Audi A8 (2003-2007) MMI swivelling unit repair manual

Tools which you will need:





- two pcs screwdriver (any kind, for vent removing)
   (you can cover the metal part with any tape to prevent making scratches on the vents plastic)
- flat screwdriver
- torx 9
- torx 15
- torx 20
- hex 4
- cutter
- pliers
- two plastic tie strap

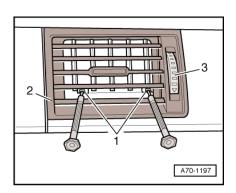
#### Please follow the steps in order as you see in the manual!

Display must be open to remove the swivelling unit. You have to open it by the open/close button, or switching ignition on . If your MMI doesn't open fully, don't worry, you can also get it out. If your MMI doesn't open at all, you have to try push up by hand while you push the open/close button.

You can remove the display and the unit with ignition on, and switch ignition off, when you removed it, so you can close the car if you need to, while you are changing the gears. If you are working in a garage so you dont have to close the car, you can also remove the battery negative terminal (10 size wrench), after you opened the MMI, so it will stay opened the whole time when you working on the unit.

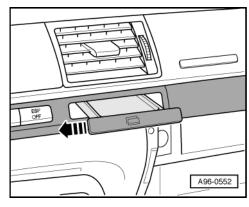
#### • First you have to remove all the dash panel vents

- Turn knurled wheel -3- of air vent fully up.
- Above bottom slat -2-, insert the two small screwdriver -1- in each of the two air vent clips.
- Alternating between left and right side, pull air vent out of opening, taking care to ensure that screwdrivers remain in position.
- Unplug connector at air vent.
- Repeat the process for all vents!



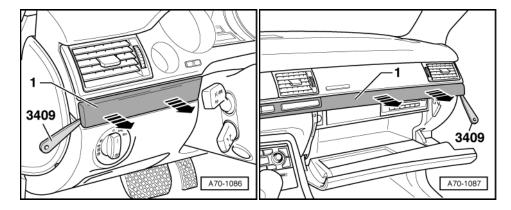
#### • Remove the coin holder trim

- Open coin holder.
- Slide trim for coin holder to left out of fastener and detach and close the holder.



## Remove the right and left side trims

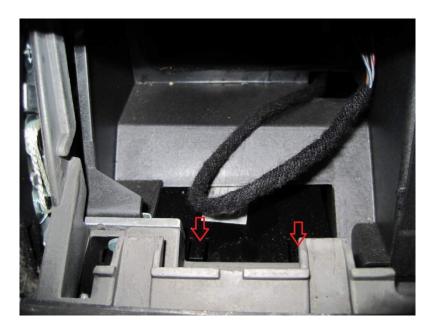
- Open glove box.
- Starting from above glove box, carefully separate trim panel with switch panel -1- from dash panel using a tape covered flat srewdriver, or a plastic visa card, or any flat tool which will not scratch the surface.
- Detach trim panel with switch panel in -direction of arrow-. Be carefull when removing, there is a connector which you will need to detach before you can fully remove. Take particular care when unfastening clip at end of trim panel closest to driver.



#### • Remove the coin holder

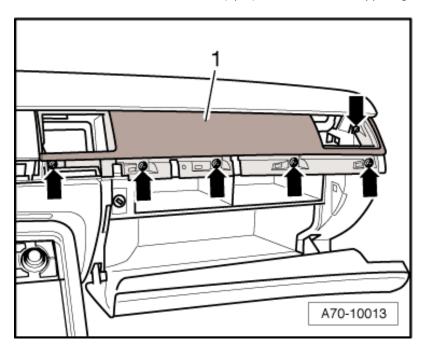
To remove the coin holder you have to push down the two clips ( marked with red arrows on the second picture), while pulling the holder out.





# • Remove the right side trim bolts marked by the arrows

Use torx 25 screwdriver for the bolts under the vents (5pcs), and hex 4 for the upper right!

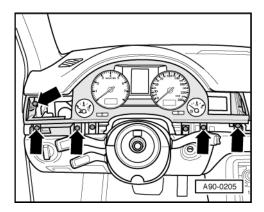


When you removed the bolts, detach the clip which is located at the left upper side. You can use a flat srew driver to pull up the plastic clip marked with the red arrow, while you can carefully start to pull the whole trim toward yourself. Be carefull do not brake it!

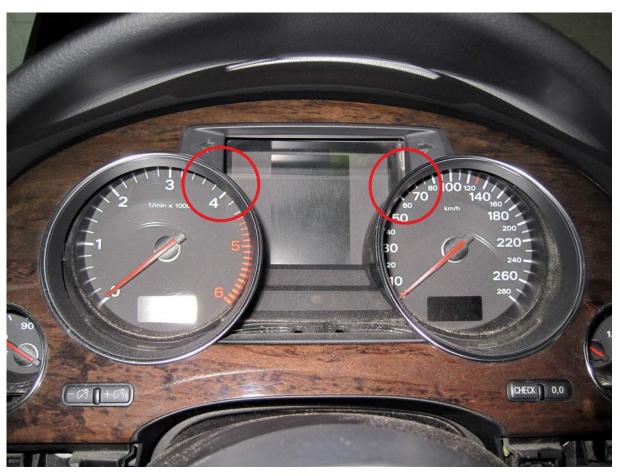


#### Remove the bolts marked with the arrows on the driver side

Use torx 25 for the bottom bolts 4 pcs, and hex 4 for the upper left.



Hold the instrument cluster cover at the marked area, and pull it carefully toward yourself around 2-3cm as you can see the second picture! Just enough to make space for the MMI unit metal housing to get out.





 Unclip the display cable protection clamp, by pushing it down at the marked area with a flat screwdriver



 Hold the unit at the marked areas, and pull slightly toward yourself, until you see the bolts at the back of the LCD



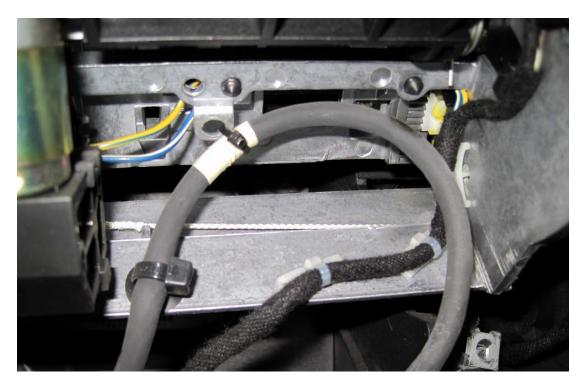
Unscrew the bolts with torx 15 screwdriver, just about same height as you can see
in the picture. You don't have to remove the bolts, only loosen them up enough to
allow the display to move up. If ready, move the display slightly up, and carefully
pull towards the arrows direction and take it out!. Detach the connector at the
bottom of the lcd!



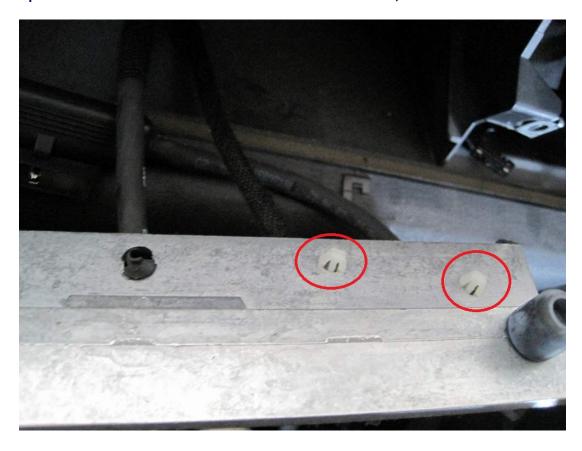
Pulling towards yourself, and slightly downwards carefully remove the MMI
mechanic from the dashboard! Be carefull with the instrument cluster side! You
cannot remove it fully, hence there are cables and connector attached to it!



As you can see as in the pictures there are cables and switches fitted to the housing, which you need to remove, before you can remove the unit fully from the dashboard.

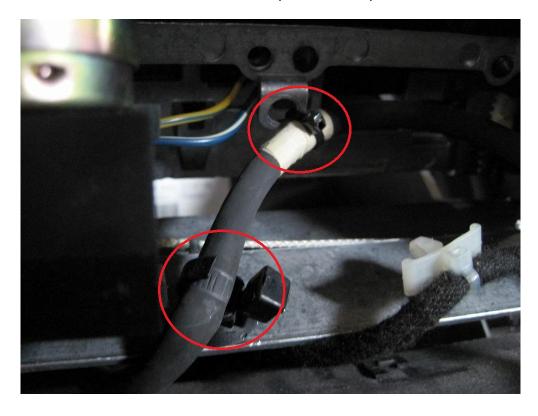


Use a pliers to detach the white cables holders. Two backside, and one at the side!

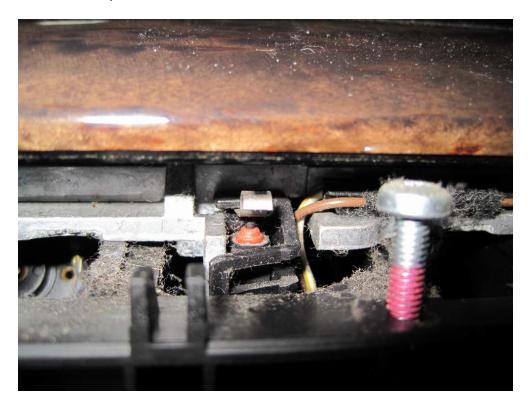


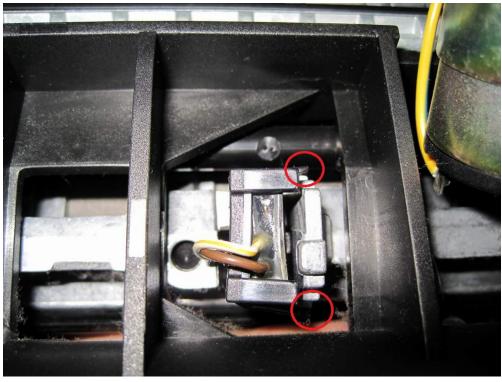


Cut down the black plastic tie straps!



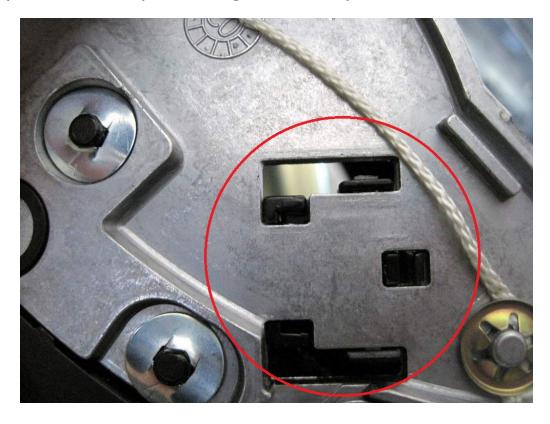
There are two switches which you need to detach from the housing. Remove the upper one first by detaching the switch plastic housing at the marked areas. Remove the plastic house from the switch, and route back the cables with the switch out of the unit.



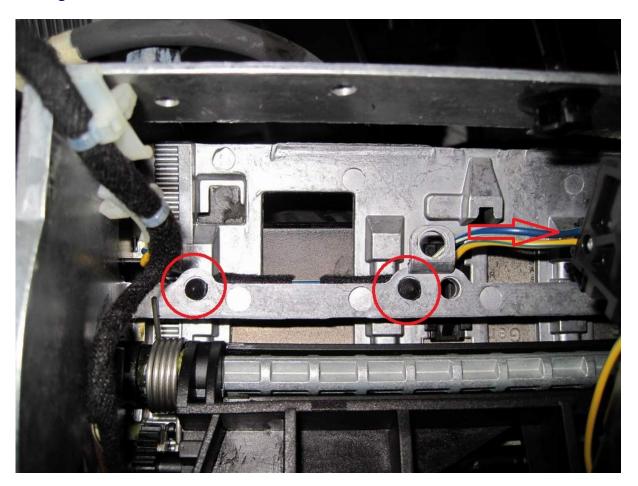




Unclip the second switch plastic housing in the same way, and remove it.

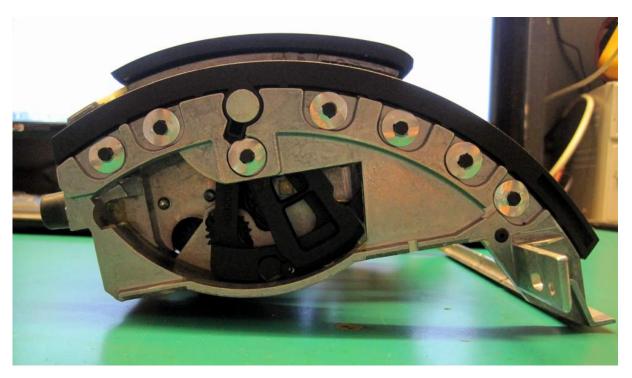


Detach the power cable from the motor (red arrow), and remove the cables from the housing.

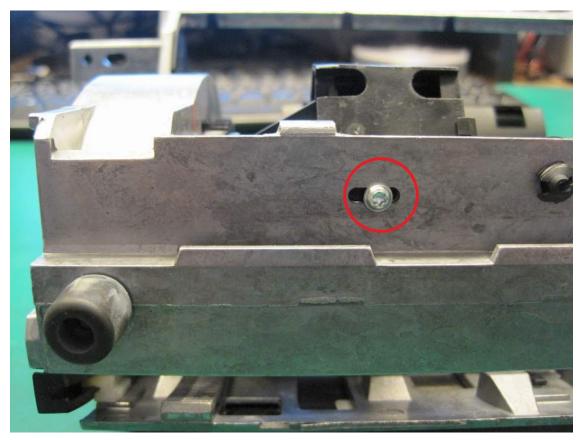


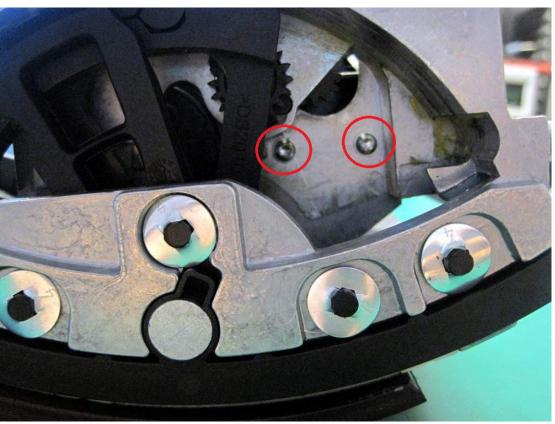
If you have done every step right, you can now remove the unit from the car!



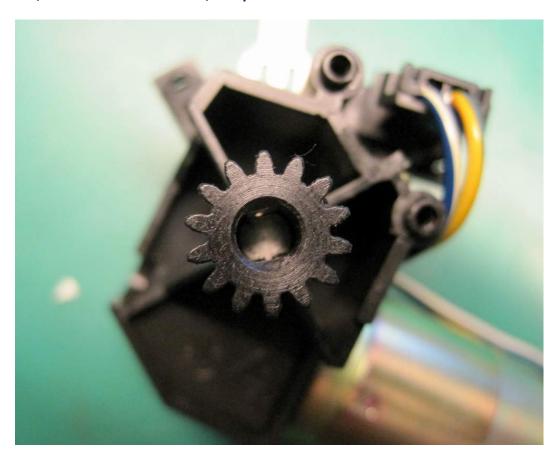


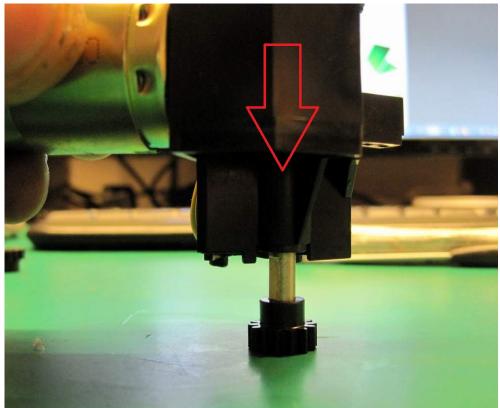
First you need to remove the electric motor. Unscrew the bolts!



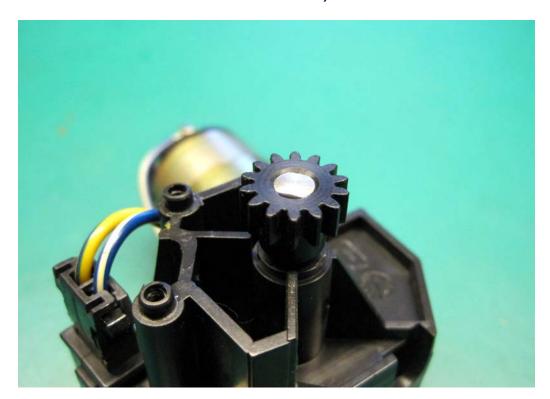


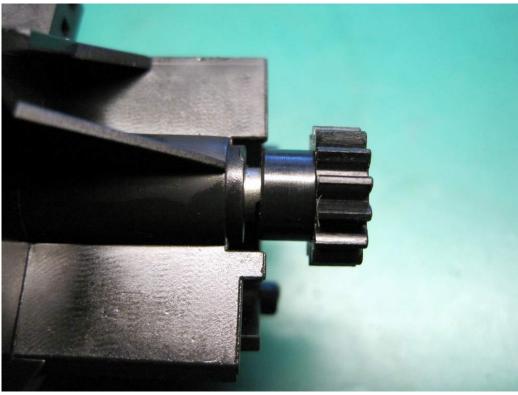
Remove the motor plastic gear, and install the new one. The original one was loosy, easy to remove, however the new one need quite a bit of force to install. Put the gear to the axis, and insert it to the table, and push the motor down in the arrow direction!





That's is how it should look like, when installed!





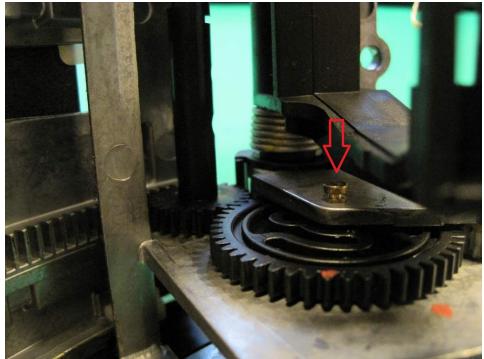
You need to remove the big black gear! First remove the small zeger ring with a flat srewdriver! Put the removed zeger ring in a secure place. don't loose it!

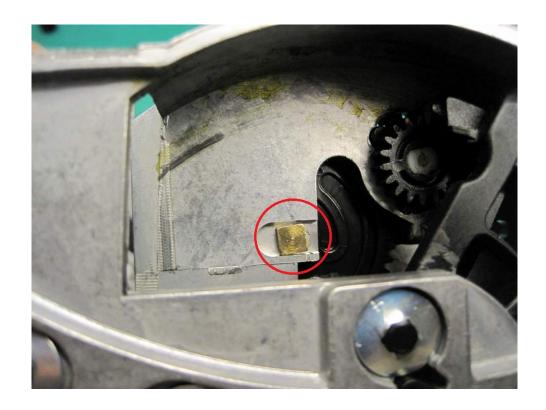




You have to close the unit now ,and push down the gear axis (marked by red arrow), and remove it.



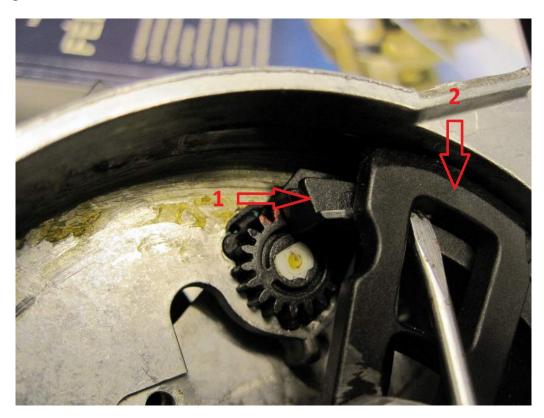


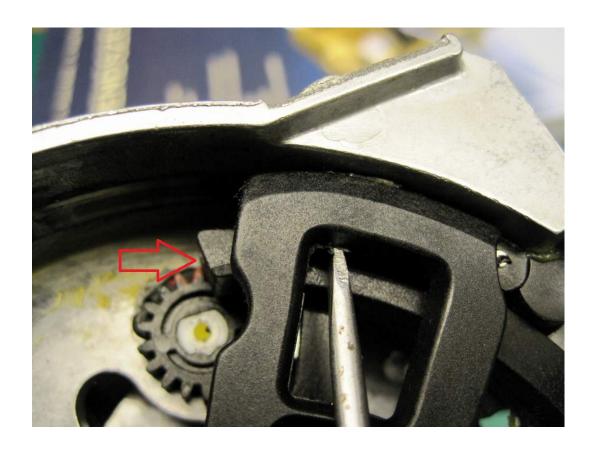


If the axis removed, you have to remove the gear itself! Watch the video named remove\_gear.wmv!

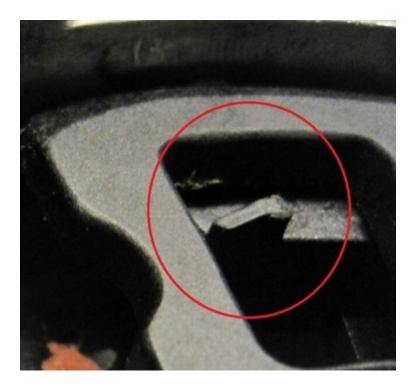


To remove the gears, you must move the swivelling arm (1) to the another arm's(2) slot. Use a flat screwdriver, push slightly inside, and rotate the srewdriver anti clockwise 90 degree, while pushing the arm (1) to the right! The swivelling arm should have enough room to move to the right! Don't worry about the arm (2), it can flex enough without braking.

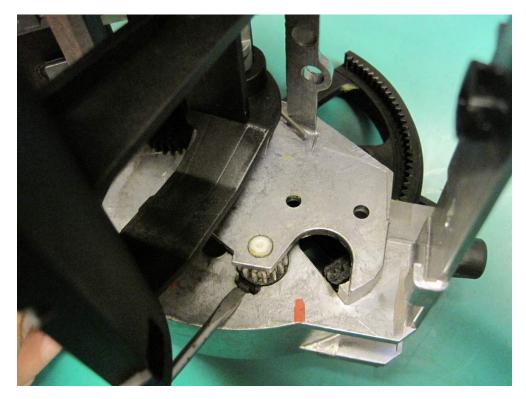


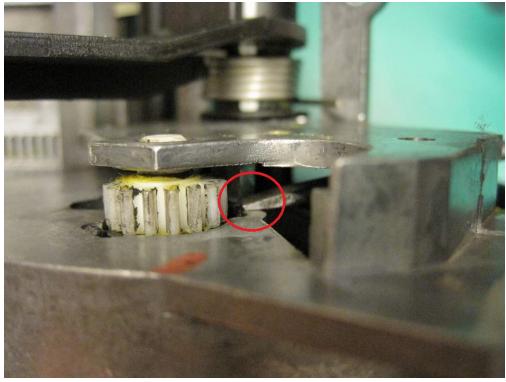


It should look like this!

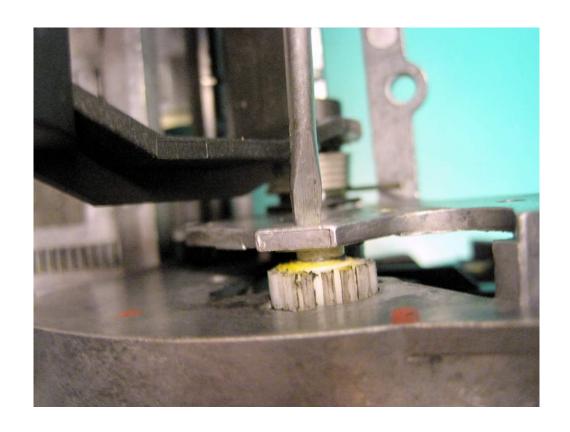


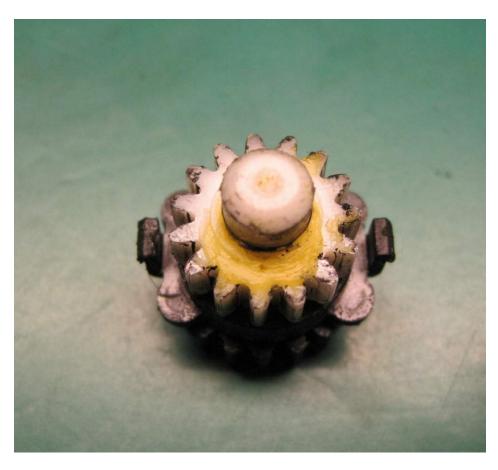
With a flat srewdriver detach the gear holder clips!





Push down the gears axis, and remove them!





Seperate the two gears with a flat screwdriver!





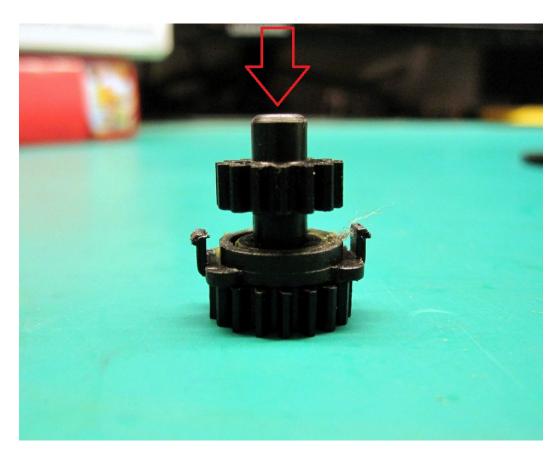
Assembly the new gears, with the gear holder!



Marked side up!



Push the gears together!



Install the gear set back!







#### **Gears installed!**



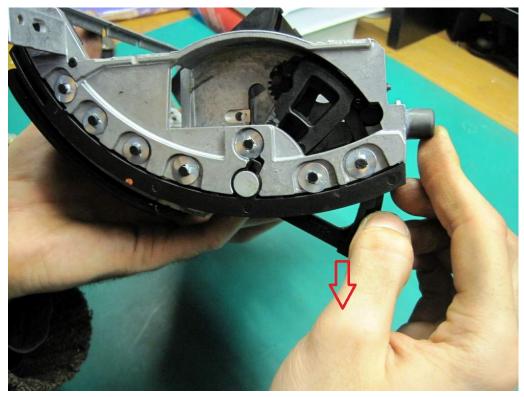


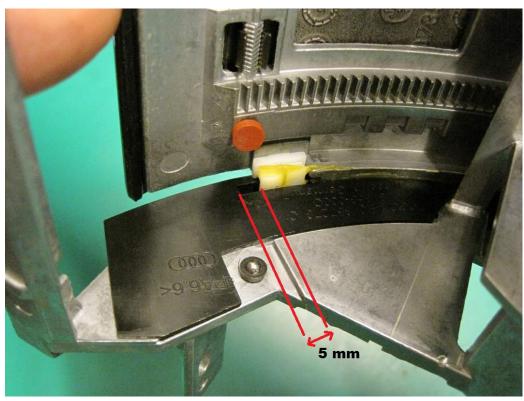
You have to move back the swivelling arm to the original position. Use a flat screwdriver again, and flex up the black plastic, while you pushing the swivelling arm in the arrow's direction. The teeth in the arm should stick to the gear teeth. It will be hard, use enough force, until the gears and the arm got back to the original position.

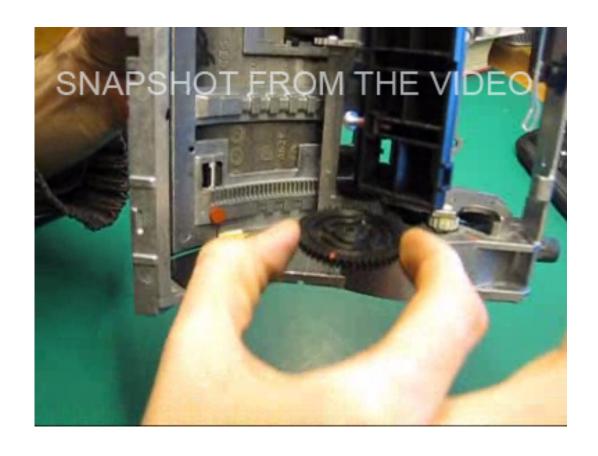
Be carefull do not brake anything. If done right, the swivelling arm should move freely, while the gears rotate with it.



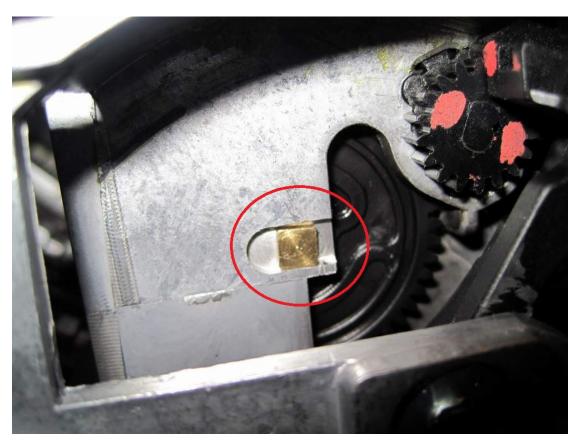
Now you have to install back the big black gear! Before watching the video named: install\_gear.wmv, check the pictures belove. You should move swivelling arm to the end position, and make sure during the gear installation, the arm must be in that position! Use one hand to hold there. In the second picture you see, you have to open the MMI cover/trim 5mm wide! This will be the position where you can insert back the big gear. NOW watch the video carefully, and install back the gear







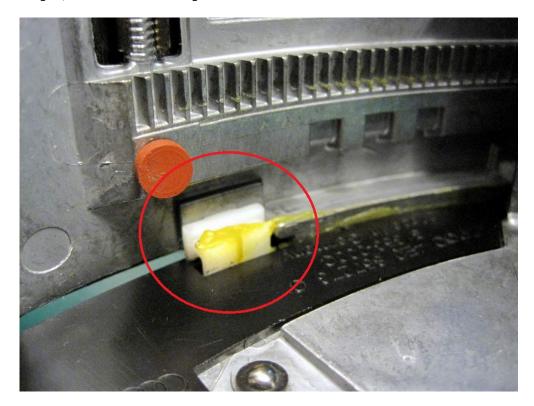
If you installed the big gear right, you should able to insert back the axis!



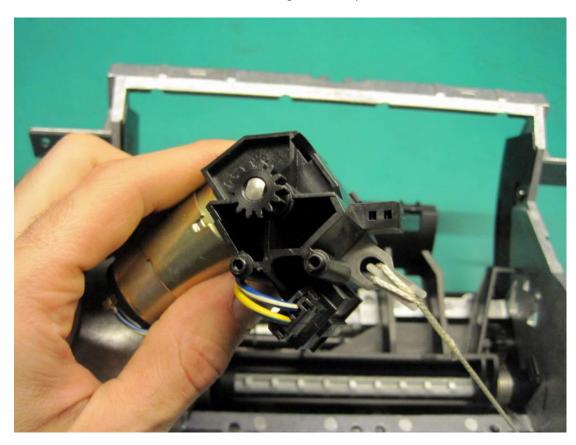
## Install back the zeger-ring!



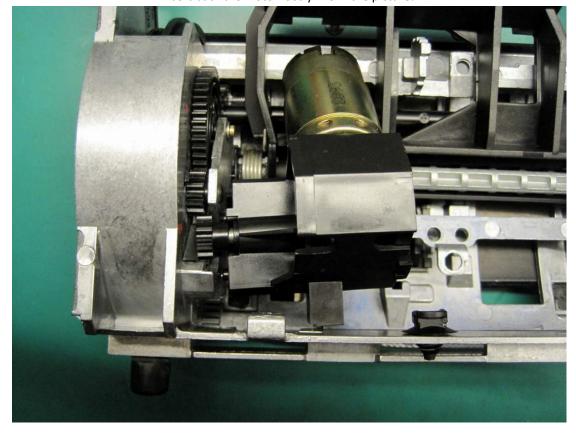
Open and close the unit, and check the closed position clearance! The white plastic should be in that position when the unit is closed. If it's not there,the gear timing is not right, and you have to remove the big gear again, and install it again, until the clearance is right!



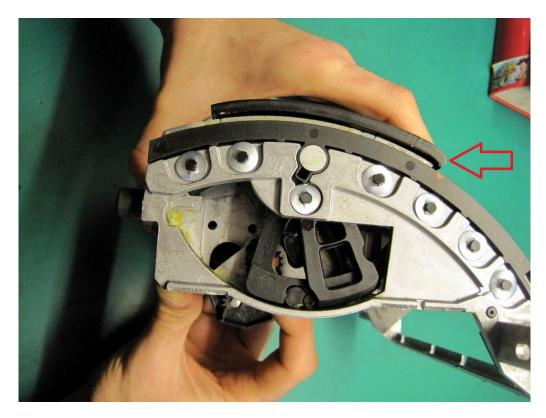
Install back the string, like in the picture!



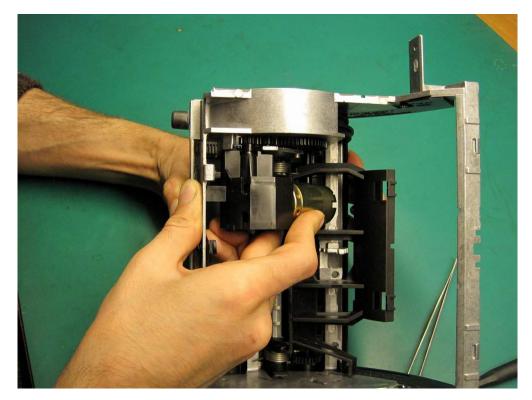
Insert back the motor loosly like in the picture!

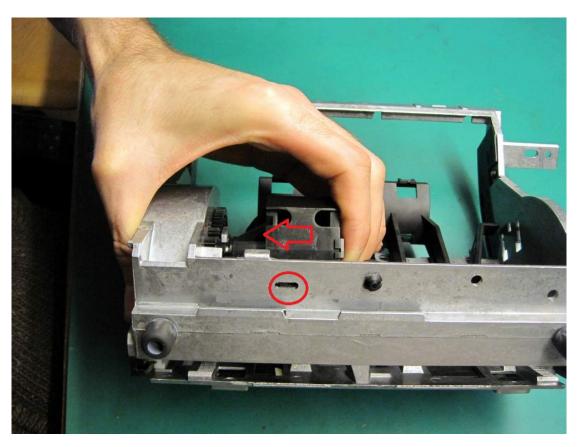


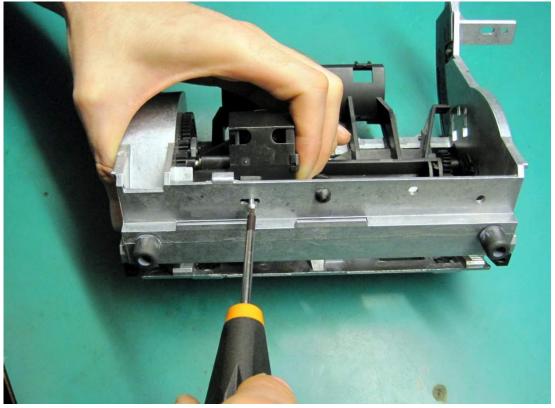
Hold the unit in your hand, just like me, and move/stress back the cover in the direction of arrow, while you insert back the motor to the original position. This is needed to get back the motor gears to the original position!



Hold the motor in place, while you screw back the bolts!





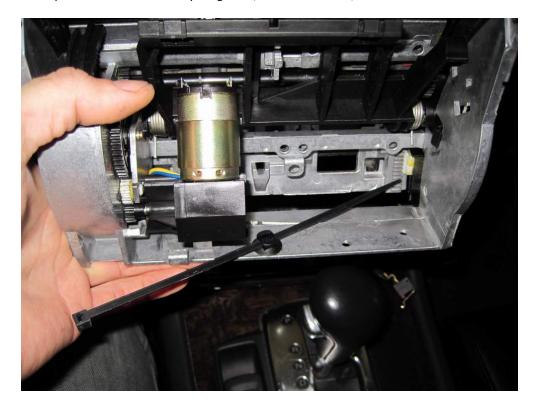


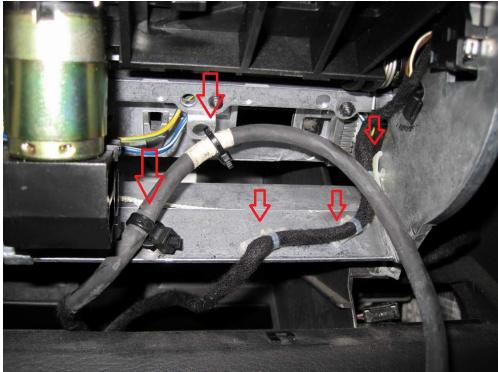


If necessary stretch the string!



Insert a bigger tie strap to the holder, and install back the unit to the dashboard in reverse order. Make sure you install back the cables in the original position, attach back cable holders, and switches, and the motor power connector! If everything done, install back trims, vents in reverse order!





If you don't understand something, or you need more help, or any other Audi part, just contact me by email.

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