

Installing RNS-E SAT NAV for Audi A4

As one of the major options on the A4 you can get a DVD Satellite Navigation System call the RNS-E. With the help of eBay these sat nav systems are now available to by at a rough cost of £650 plus the cost of all the other parts that are required.

This document shows a step by step install of the RNS-E into an A4 for that has been fitted with a single DIN stereo.

Tips and Tricks

As there are a lot of bolts than need removing during this install, use a supply of small coin bags to keep the bolts for each area together and label the bags accordingly.

Install difficulty



(the  more the harder the install)

Installing RNS-E SAT NAV for Audi A4

Parts Required

1 x **RNS-E Unit** - Part Number: 8E0 035 192 C or 8E0 035 192 D (EUROPEAN VERSION)



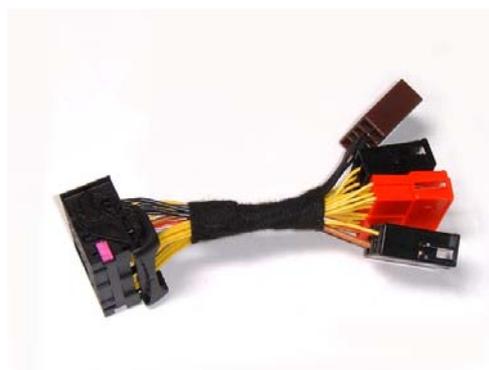
1 x **Double DIN style climate control** unit (make sure the one you buy has all the same switches that your current unit has i.e. heated seats etc..) This item can be ordered from Audi at a high cost or bought off ebay.



1 x **GPS Antenna** - with either an SMB or FAKRA connector. Can be purchased from ebay or www.kufatec.de



1 x **RNS-E Adapter** – Part Number 33350 from www.kufatec.de/shop

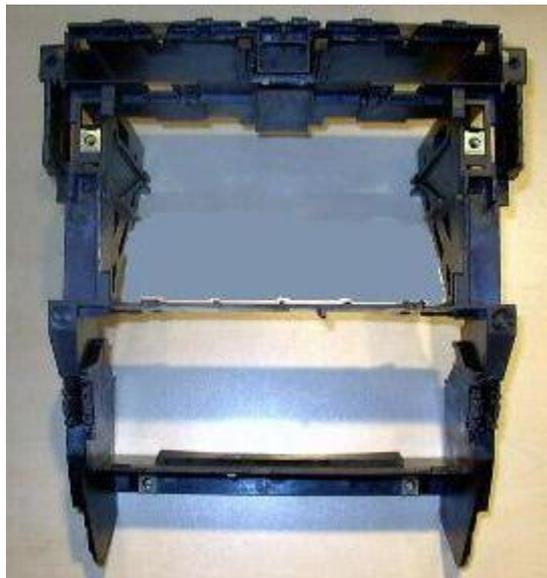


Installing RNS-E SAT NAV for Audi A4

1 x RNS-E Antenna Adapter - Can be purchased from ebay or www.kufatec.de



1 x Double DIN Dash Housing – Available from Audi Parts department or eBay.

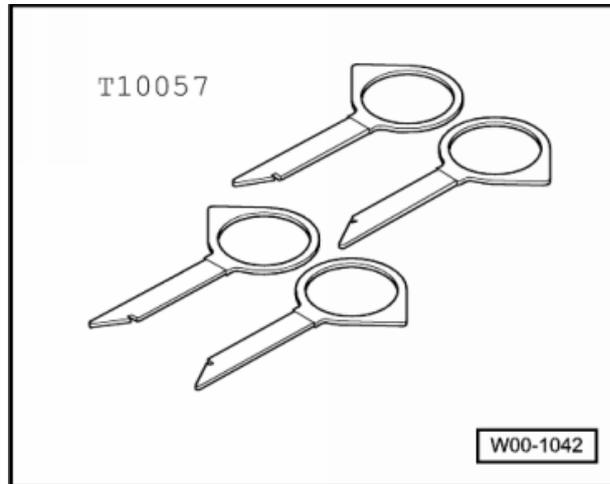


1 x RNS-E Western Europe DVD (Try and buy the latest version that is out as this will also update your RNS-E Firmware to the latest version)

Installing RNS-E SAT NAV for Audi A4

Tools Required

4 x Radio Removal (These can be purchased off ebay or from Halfords etc..)



1 x Hacksaw with Fine Blade (Suitable for cutting plastic)

1 x Screwdriver Set which has hex style bits

1 x Socket Wrench with Extension Arm

1 x 8mm Socket

1 x 13mm Socket

1 x Small flat head screwdriver

1 x Stanley Knife with a sharp blade

1 x Ruler

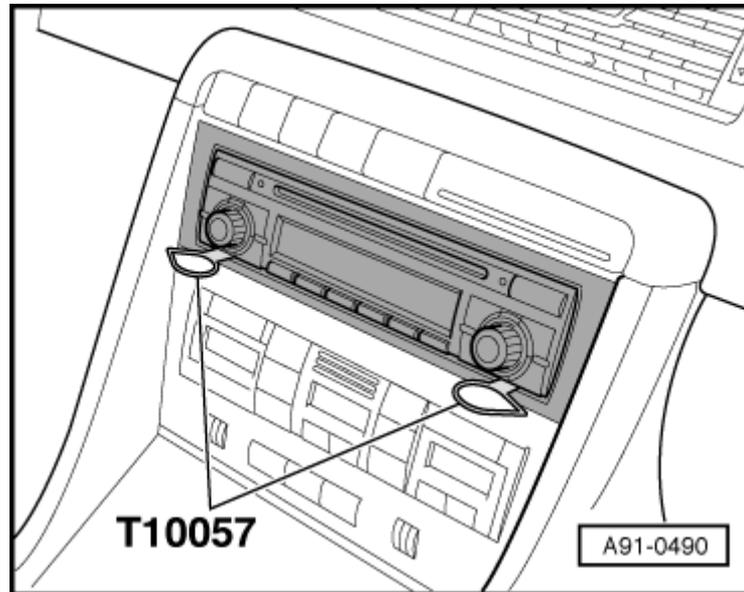
1 x Wire Cutters

10 x Cable Ties

Installing RNS-E SAT NAV for Audi A4

Part 1: Removing and installing “chorus” and “concert” radios

- a) Switch off all electrical equipment.
- b) Remove ignition key.
- c) Prior to removing the radio check that you have the anti-theft code and have removed any Tapes/CD's from it.
- d) Insert radio release tool -T10057- into release slots as illustrated until they engage. Pointed ends of grips must face outwards.



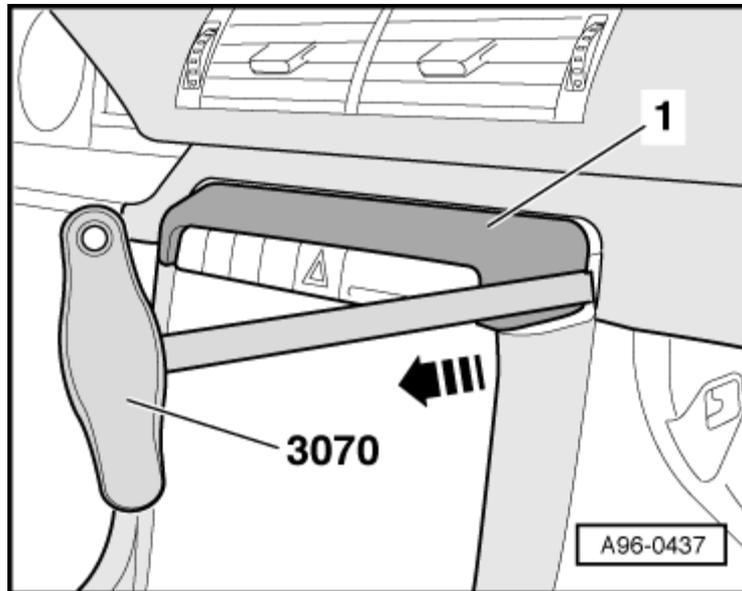
- e) Grasp hold of grips on radio release tool -T10057- and pull radio out of dash panel.
- f) Release and unplug connectors at the back of the stereo unit.
- g) Press the tabs on the sides of the radio and pull out release tools.



Installing RNS-E SAT NAV for Audi A4

Stage 2: Removing plastic trim and switches from the centre of the dash

- a) Unclip upper switch module trim by hand or with a small flat head screwdriver which has had the end wrapped with electrical tape (this will stop the dash/trim from getting scratched) -1-

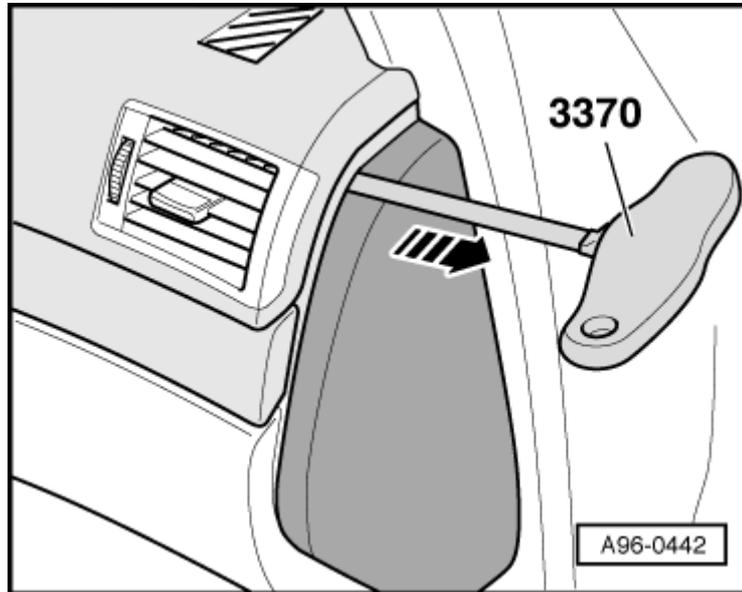


- b) Detach trim for switch module.
- c) Carefully remove the hazard warning switch by hand.
- d) Unplug electrical the connectors off the switch (The connector is colour coded so there is no need to make a note of where it goes).

Installing RNS-E SAT NAV for Audi A4

Stage 3: Remove right and left dash panel covers

- a) Open the driver's door.
- b) Use small flat head screwdriver which has had the end wrapped with electrical tape (this will stop the dash/trim from getting scratched) to remove the side panel cover.



- c) Open the front passenger's door and repeat the process (b) on this side as well.

Installing RNS-E SAT NAV for Audi A4

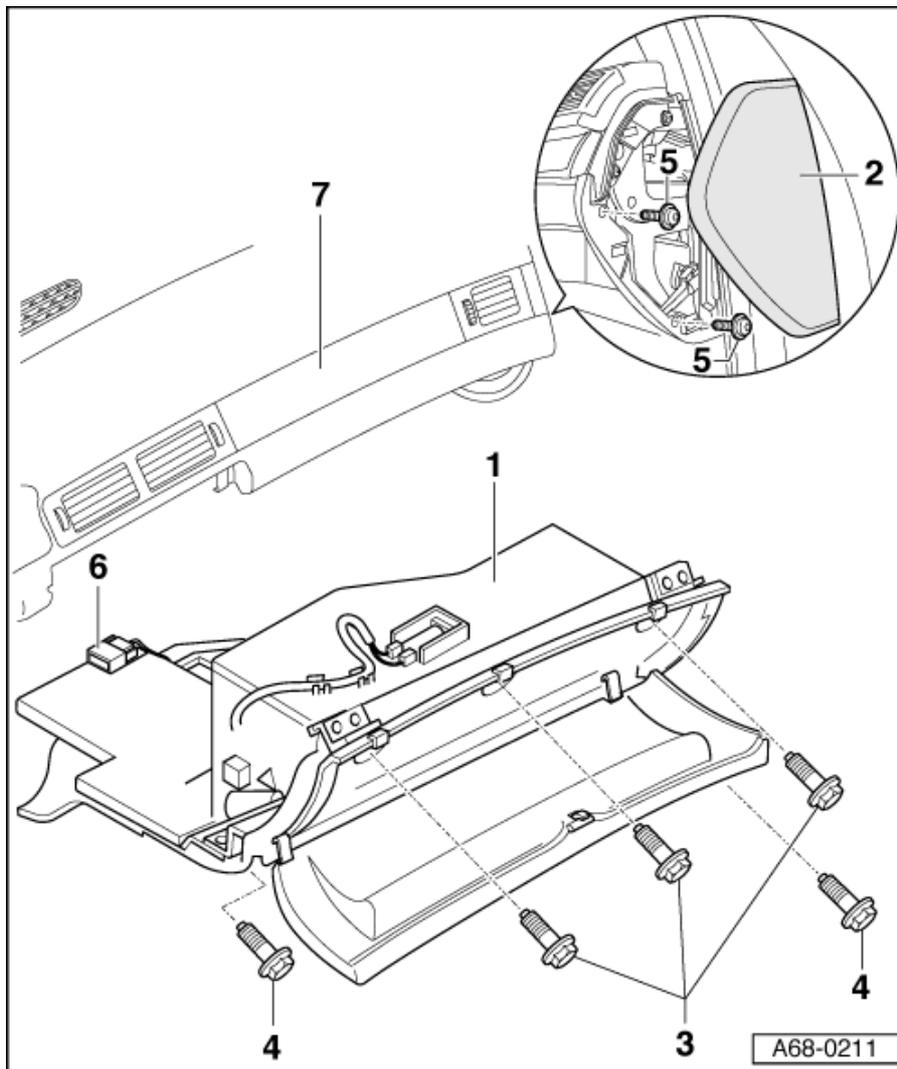
Stage 4: Remove the Glovebox

WARNING!!

If you car has an airbag deactivation switch in the glove box complete the following task prior to completing this stage.

TASK: Switch the airbag deactivation switch in the glove box to the off position, then switch the ignition around to the until the airbag off light is displayed on the dash, then switch the ignition off and remove the key.

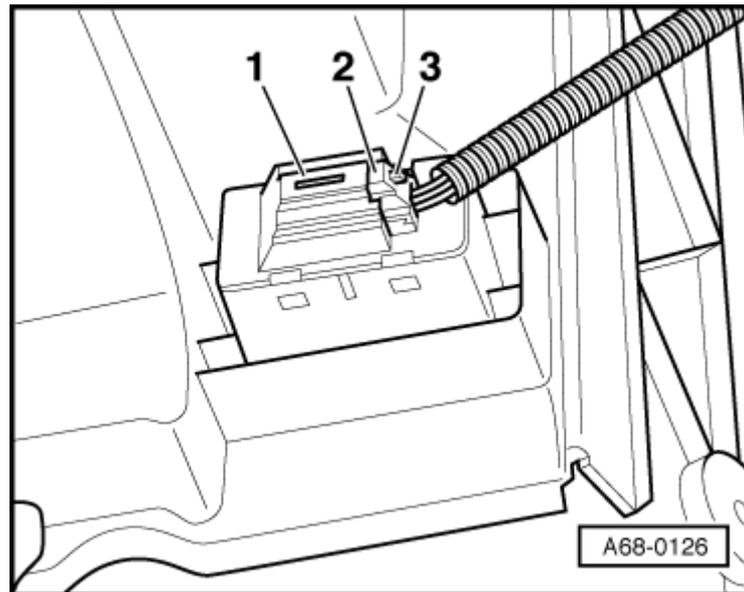
REASON: Completing this will cause the car to acknowledge that you have manually switched off the airbag. If you don't complete this and then disconnect the glovebox you may need to take the car to your dealer to reset the airbag light.



- So not to scratch the glovebox make sure the floor mat is clean or covered with a towel.
- If you have a CD changer in the glovebox remove this with the stereo removal keys and unplug the connector at the back.
- Remove the 3 bolts -3- in recesses at top of glove compartment -1- with an 8mm socket.

Installing RNS-E SAT NAV for Audi A4

- d) Using the same socket remove bolts -5- (2x) from the side, from the outside.
- e) Then use the socket to remove bolts -4- (2x) from underneath, from footwell.
- f) Pull out glove compartment downwards.
- g) Disconnect the glovebox connection located at the back of the glovebox.
- h) Unplugging connector for passenger airbag key switch (If present on your car) Press release mechanism -3- and remove connector -2- from switch -1-.

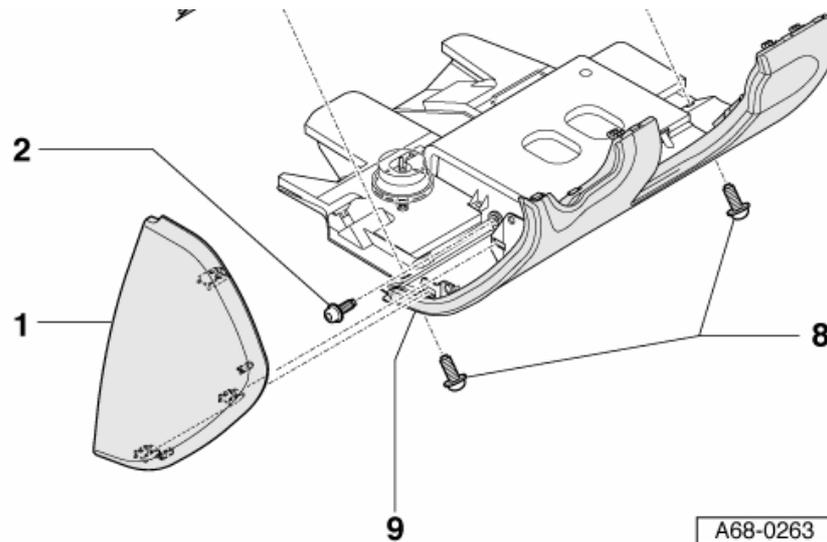


Picture of Glovebox after it has been removed.



Installing RNS-E SAT NAV for Audi A4

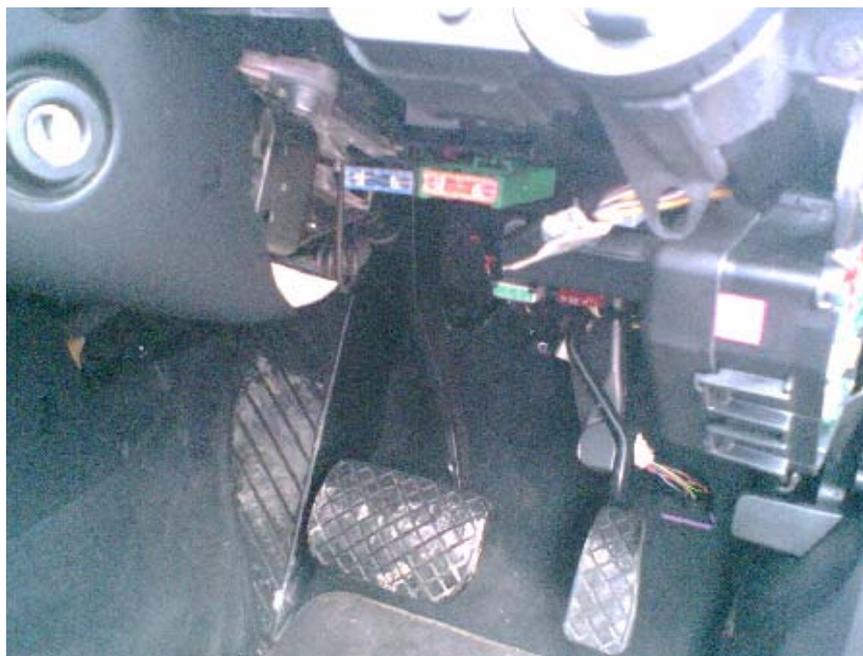
Stage 5: Remove the Driver's Storage Compartment



Note: The above picture is from a left hand drive vehicle but the principle is the same for the right hand drive version.

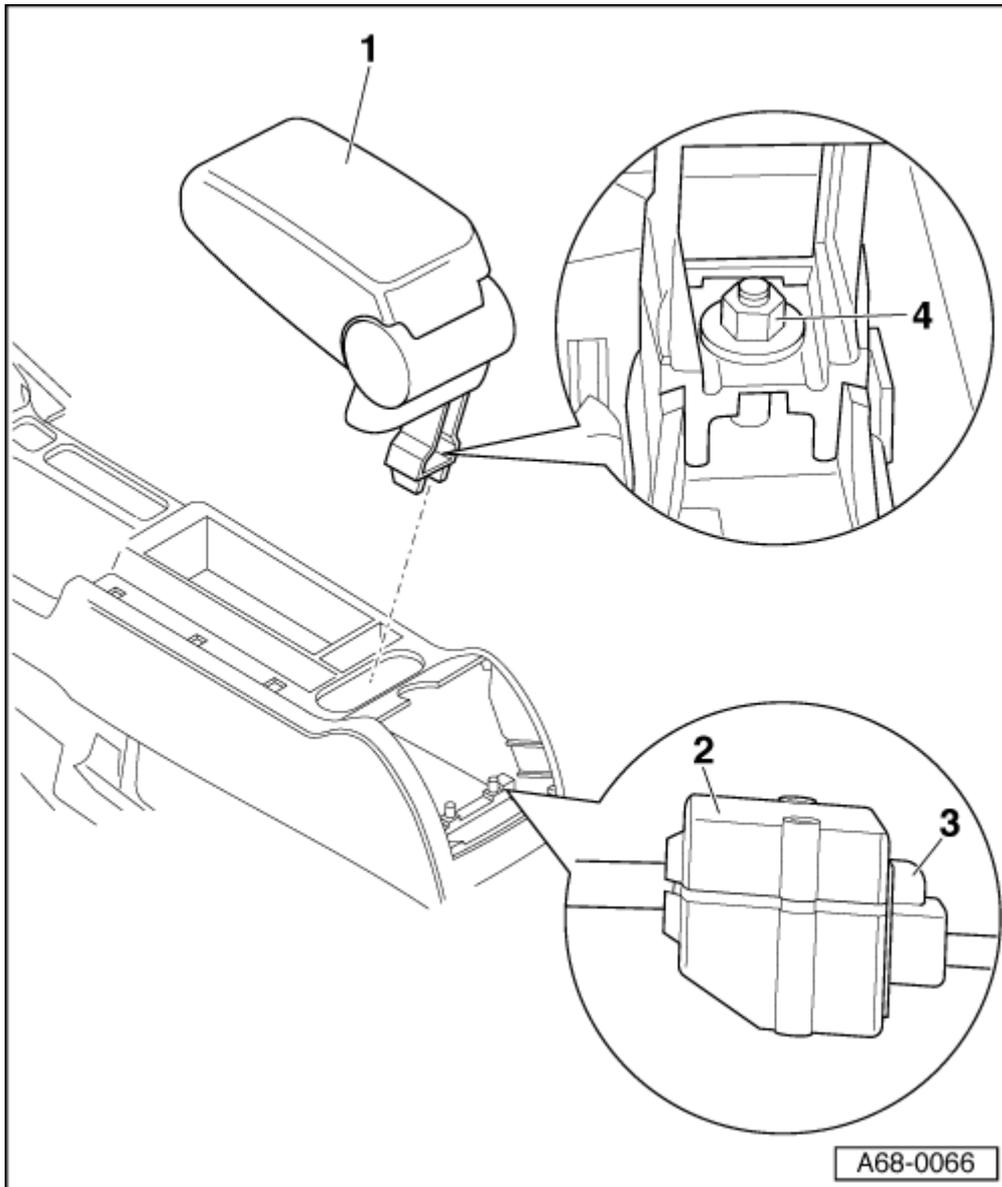
- So not to scratch the storage compartment make sure the floor mat is clean or covered with a towel
- Remove bolts in positions -2- and -8- with an 8mm socket.
- Carefully pull storage compartment at top of dash panel each side of the steering wheel boss until it unclips.
- Unclip diagnostic connector at the bottom on the right.
- Unplug connector on footwell light and on additional loudspeaker, if applicable.

Picture of storage compartment after it has been removed.



Installing RNS-E SAT NAV for Audi A4

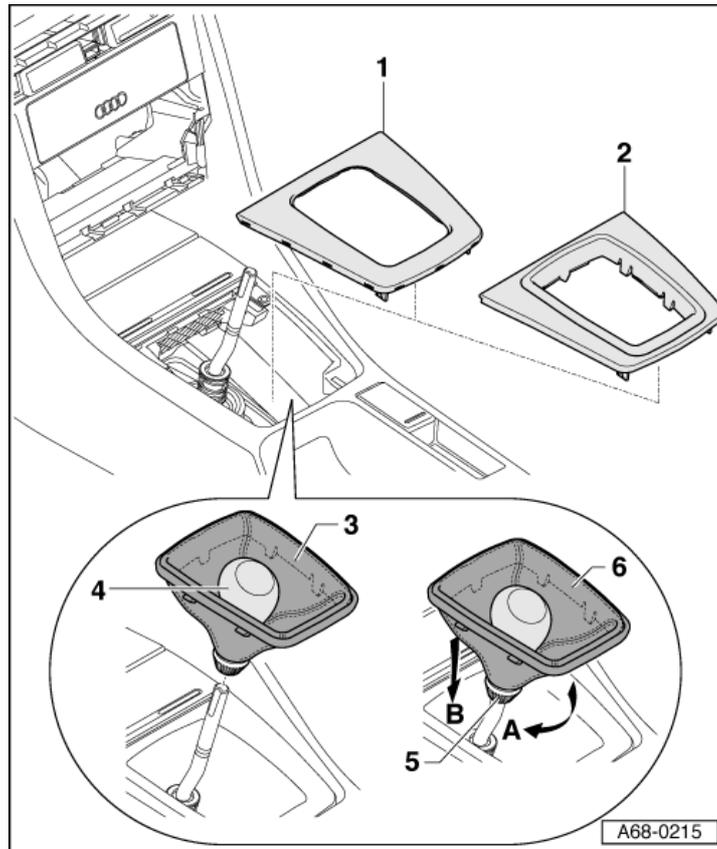
Stage 6: Remove the Centre Armrest (if present)



- a) Remove rear ashtray
- b) Remove nut -4- in ashtray well with a 13mm Socket
- c) On centre armrest with telephone, unplug connector -2- by squeezing retainer tabs -3-
- d) Remove centre armrest - 1-

Installing RNS-E SAT NAV for Audi A4

Stage 7: Remove Gear Gaiter/Cover



Automatic gearbox cover

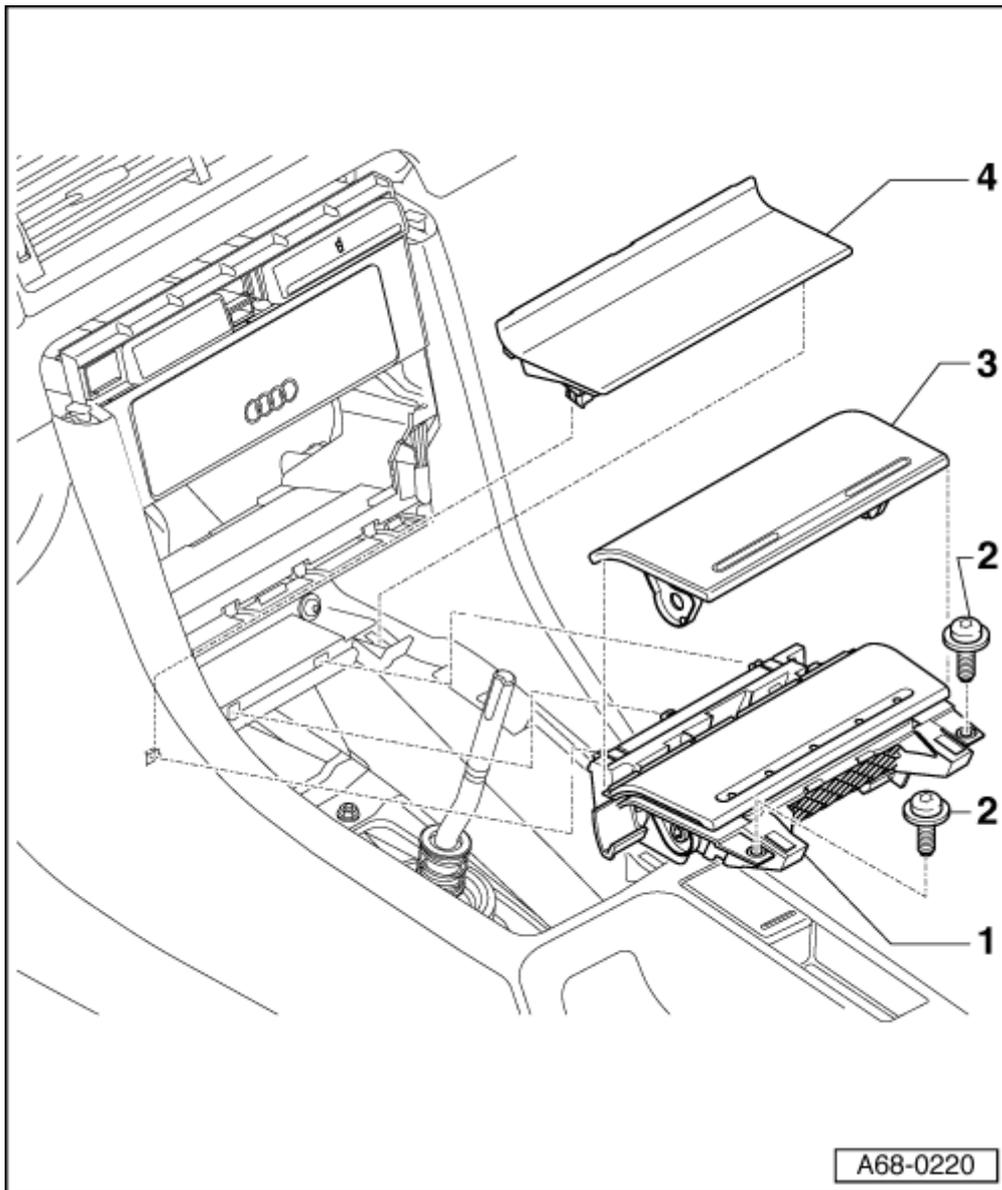
- Lever off selector mechanism cover -1-.

Manual gearbox cover

- Unclip mounting frame -6-.
- Lift up the gaiter so it is clear of the plastic surround.
- Lever off selector mechanism cover -2-.

Installing RNS-E SAT NAV for Audi A4

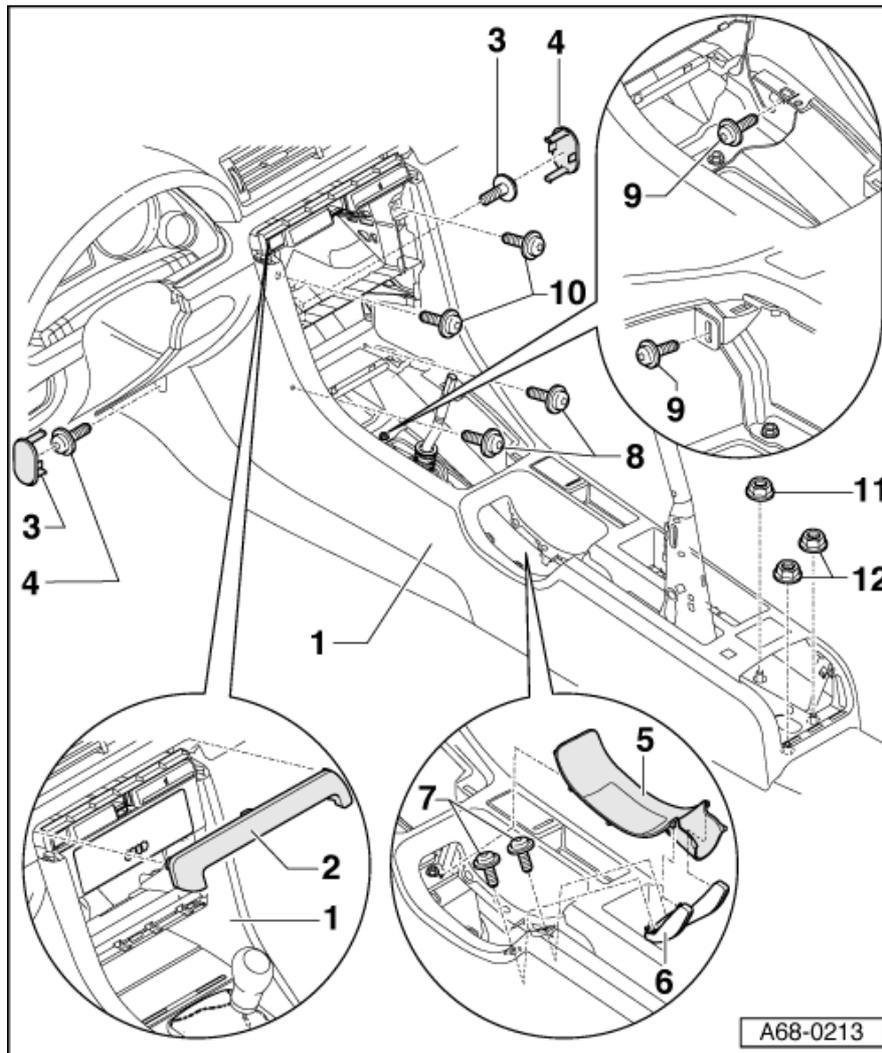
Stage 8: Remove the Ashtray



- a) Release the two screws -2- on ashtray.
- b) Remove ashtray -1-.
- c) Unclip storage compartment trim -4-.

Installing RNS-E SAT NAV for Audi A4

Stage 9: Remove the Centre Console



- a) Apply handbrake firmly.
- b) Remove caps -3- of bolts -4- on right and left of front footwell at side of centre console.
- c) Remove bolts -4- on right and left of front footwell at side of centre console.
- d) Lever out cover -5- from front.
- e) Remove the two cross-head screws -7- on connecting piece -6- and remove connecting piece. Otherwise the trim cannot be pulled over the handbrake lever.
- f) Remove the two screws -8- in ashtray opening.
- g) Remove the four bolts -9- round the manual gearbox (if applicable), which hold centre console.
- h) Remove the two screws -10-.
- i) Remove the two hexagon combi nuts -12- with a 13mm Socket.

Installing RNS-E SAT NAV for Audi A4

- j) Push centre console firmly backwards, disconnect the cigarette lighter cable and remove from vehicle.

Picture of the console after all the components have been removed apart from connecting piece -6-. Shown by the red arrow.

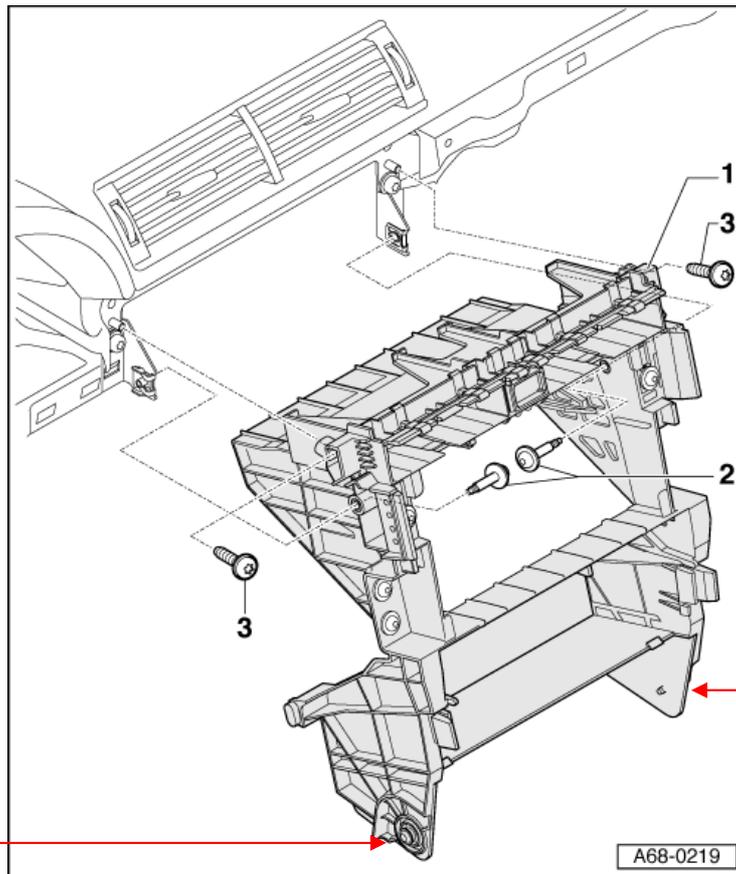


Picture of the Centre Console after it has been removed.

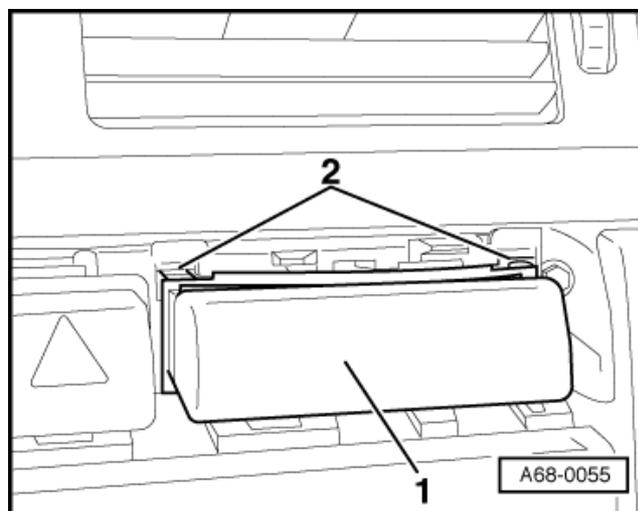


Installing RNS-E SAT NAV for Audi A4

Stage 10: Removing the Center Section of the dash (Single Din Housing)

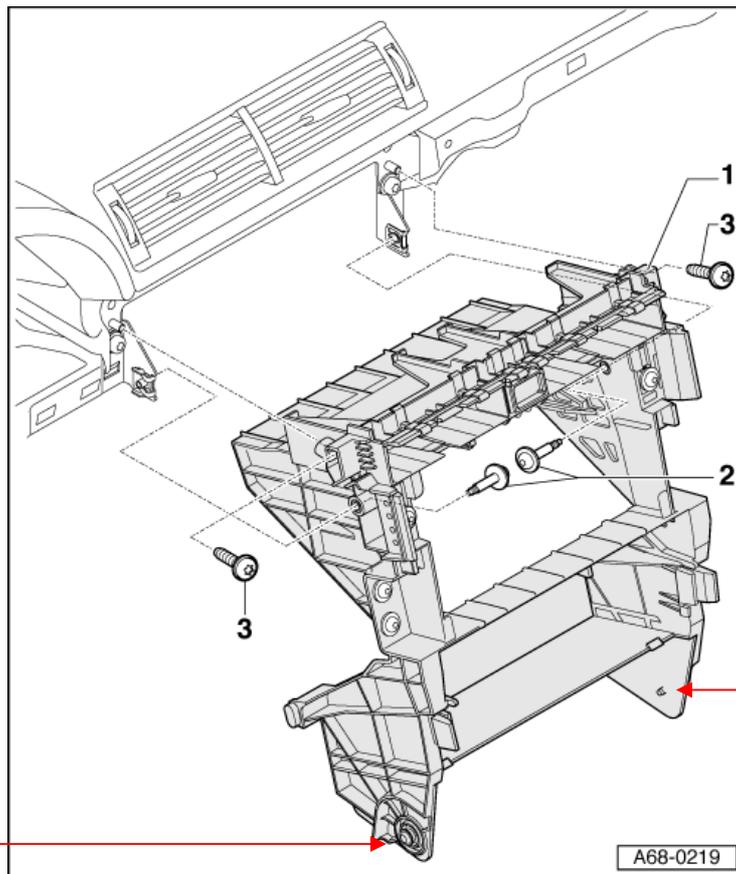


- Remove bolts -2- on dash panel centre section
- Remove bolts -3- on dash panel centre section.
- Remove screw from the areas marked by the red arrows on the diagram.
- Detach centre section of the dash-panel.
- Disconnect the ESP switch, the connectors going into the Climate control.
- Remove the cup holder and storage compartments by pushing in the holding clips - 2 - on the top of each item and then slide the compartment out.



Installing RNS-E SAT NAV for Audi A4

Stage 11: Fitting the new double din console.

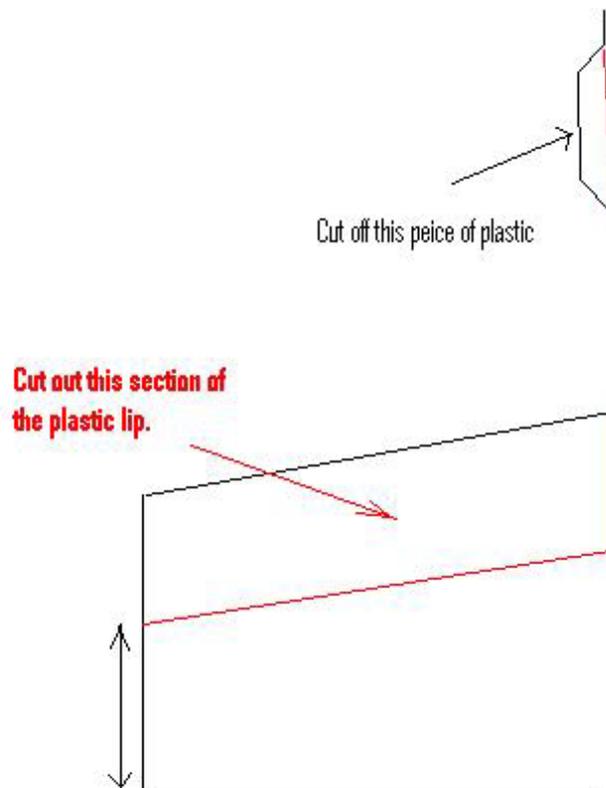
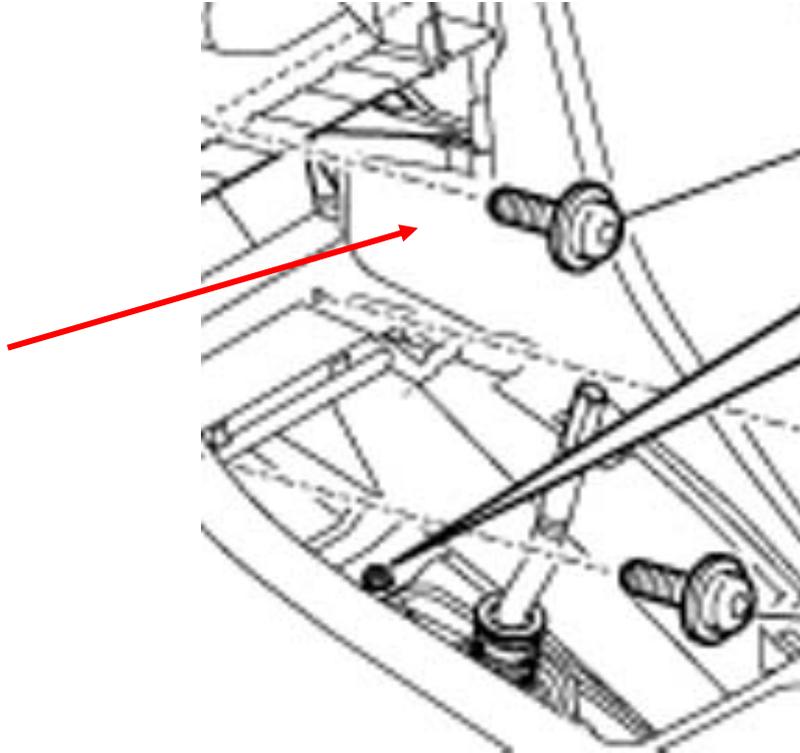


- a) Insert the cup holder, storage compartment, and switches into the Double Din console. Make sure that they go in the same order that they were removed from the Single Din Console.
- b) Insert the Double Din console into the dash and align it with the location pins - 1 -
- c) Screw in the 2 screws from the area marked with the red arrows on the diagram above.
- d) Reconnect the cables to the back of the storage compartments and switches.
- e) Insert bolts – 2 – and – 3- and tighten.

Installing RNS-E SAT NAV for Audi A4

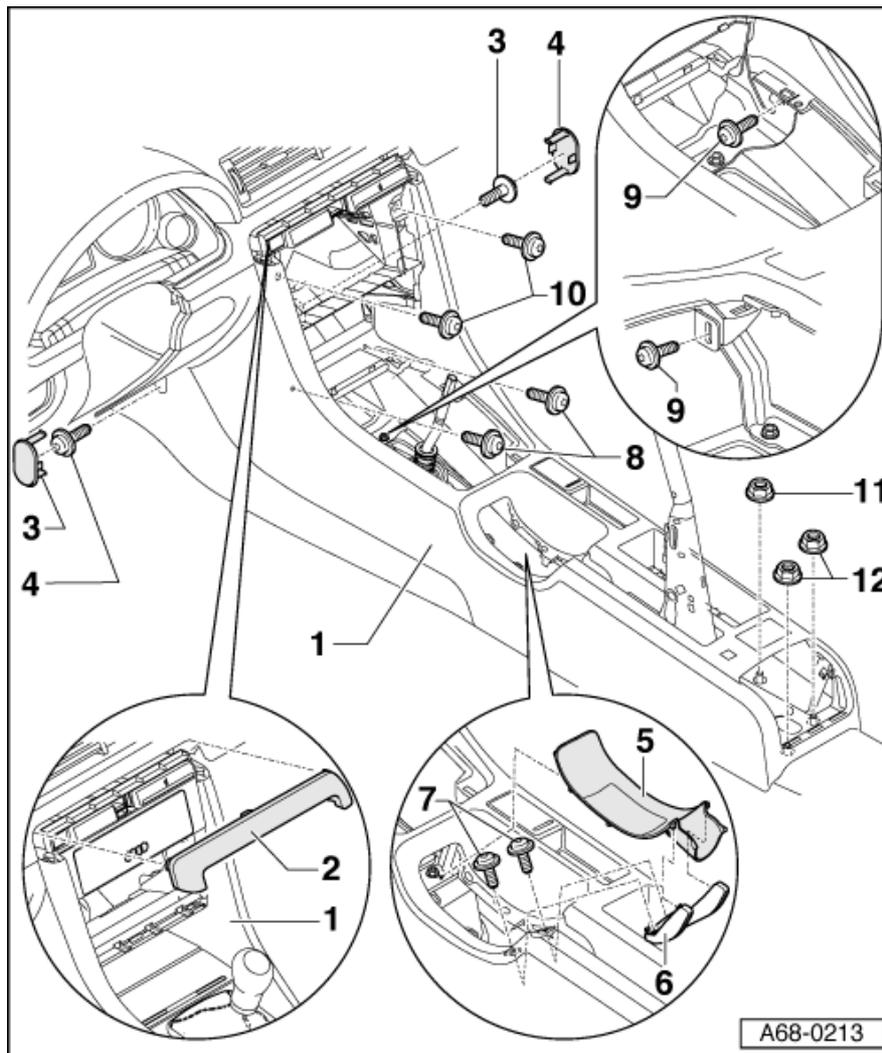
Stage 12: Cutting the Centre Tunnel.

In order for the original centre tunnel to be re fitted there are two small sections that need to be cut out along with two corners. These parts are completely hidden when all the items have been refitted. **The main area that needs to be cut is shown below by the red arrow!**



Installing RNS-E SAT NAV for Audi A4

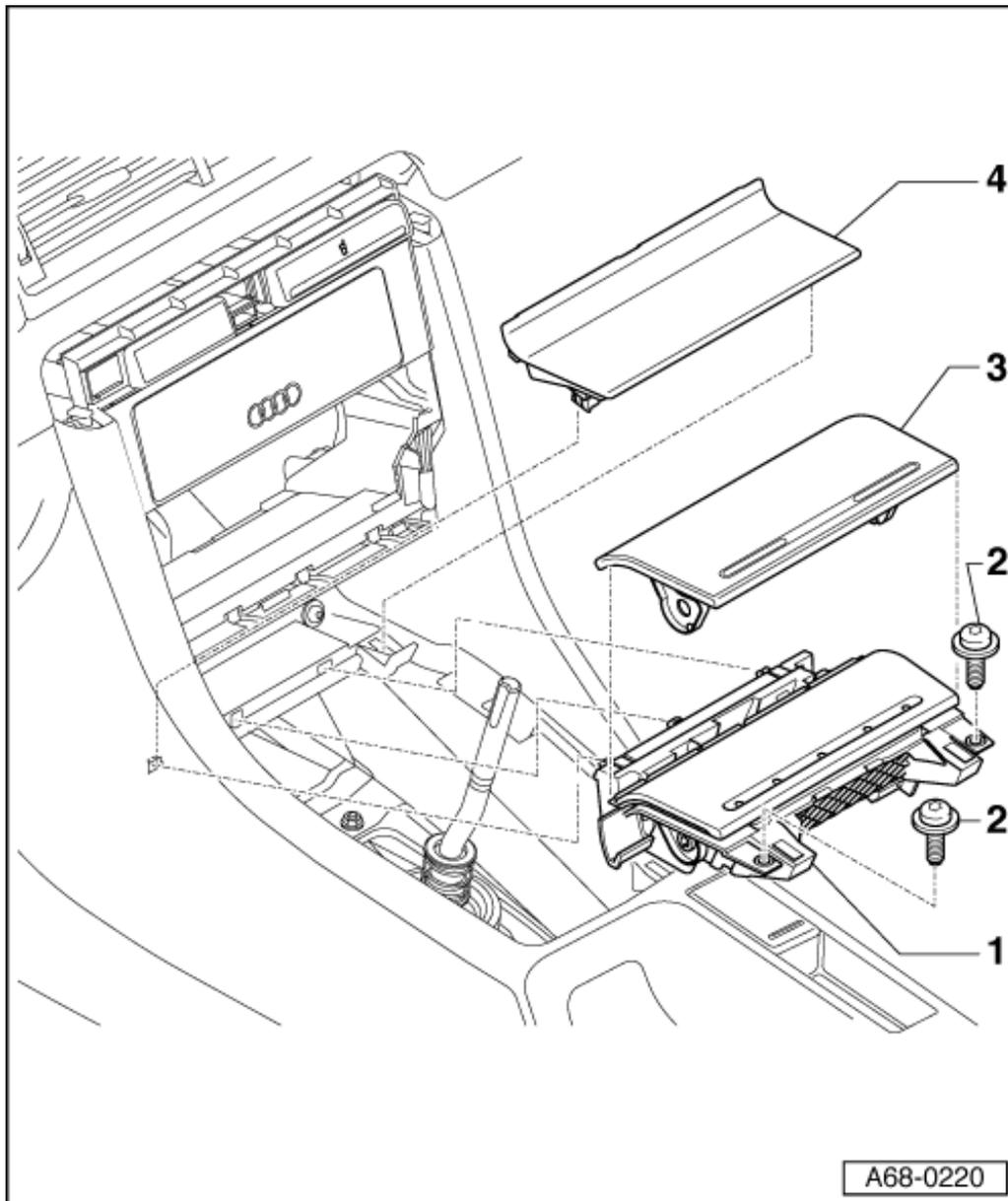
Stage 13: Re-installing the Centre Tunnel.



- a) Align the centre console with the new double Din housing and push down over the handbrake. The bolting points – 12 - at the end of the console should align with there original position.
- b) Reconnect the cigarette lighter cable.
- c) Reinstall the two hexagon combi nuts -12-
- d) Reinstall the four bolts -9- round the manual gearbox (if applicable), which hold centre console
- e) Reinstall bolts – 10 – and bolts – 8 -
- f) Reinstall Piece -6 – into the handbrake lever area and fix in using the 2 screws – 7 -.
- g) Clip in cover -5- from back.
- h) Re insert the plastic trim that you remove from the dash in stage 2 of this install document.

Installing RNS-E SAT NAV for Audi A4

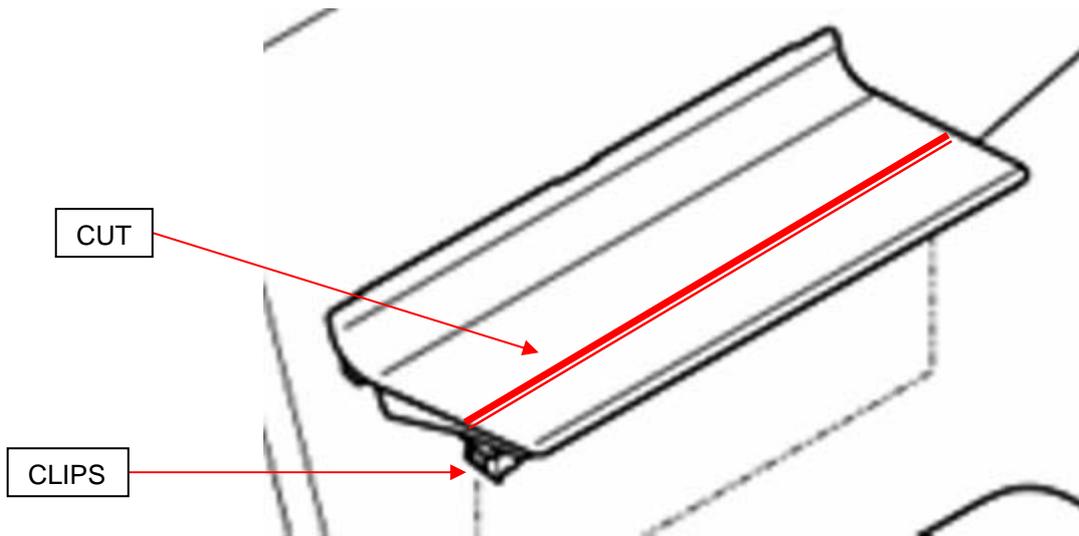
Stage 14: Reinstalling and modifying the Ashtray.



- a) Part 4 in the picture needs to be cut in order to fit it back in. There are 2 clips that hold this piece into the console. You need to cut a straight line directly after these clips and cut along it. Please see the diagram below.

Installing RNS-E SAT NAV for Audi A4

Stage 14: Reinstalling and modifying the Ashtray Cont....



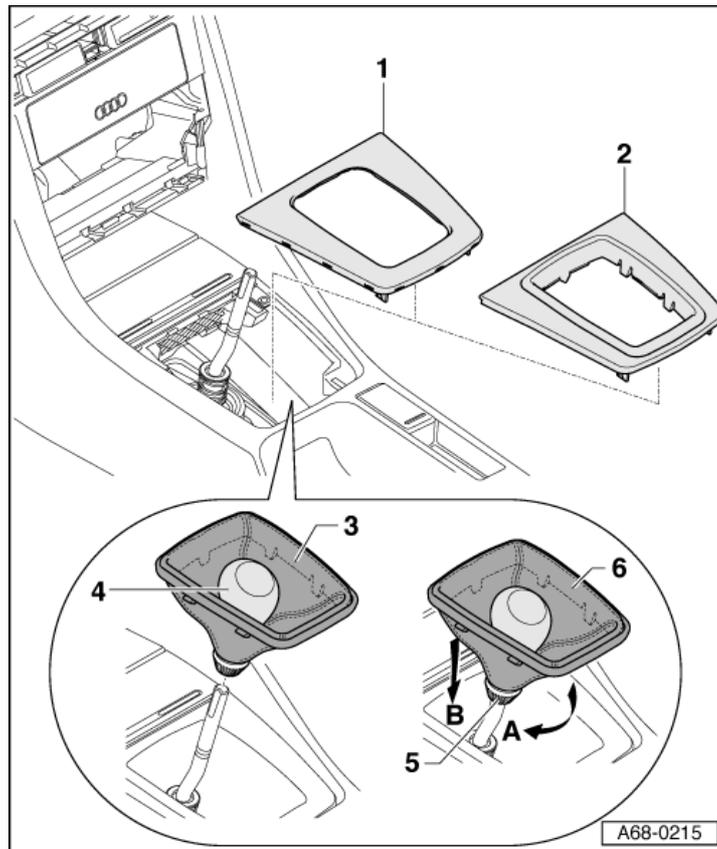
- b) Clip in storage compartment trim -4- now that it has been modified
- c) Insert ashtray -1-.
- d) Insert the two screws -2- on ashtray.
- e) Remove ashtray -1-.

Installing RNS-E SAT NAV for Audi A4

Stage 15: Installing the Climate Control Unit.

- a) Pull the cables for the climate control unit through the bottom aperture of the double din console.
- b) Clip the cables into the climate control unit (they have specific locations so they can not be connected incorrectly).
- c) Slot the climate control unit into the housing and it will lock into place.

Stage 16: Fit the Gear Gaiter/Cover



Automatic gearbox cover

- a) Clip on selector mechanism cover -1-.

Manual gearbox cover

- b) Clip on selector mechanism cover -2 -.
- c) Push the gaiter mounting frame -6- into the plastic surround.

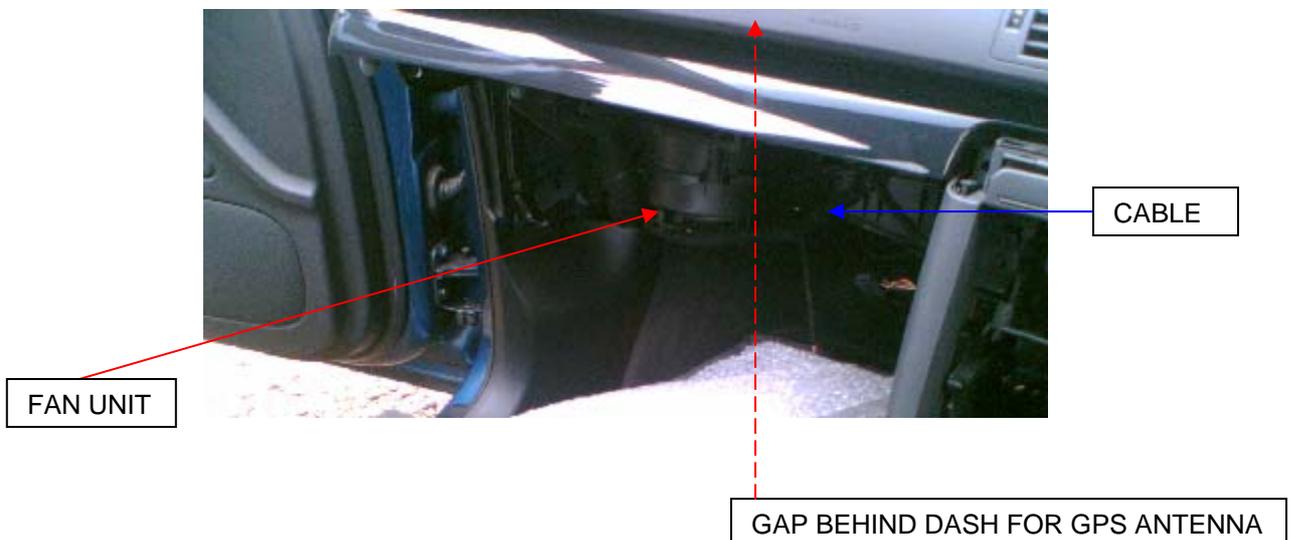
Installing RNS-E SAT NAV for Audi A4

Stage 17: Fitting the RNS-E Unit.

- a) Connect the RNS-E adapter cable to the existing Audi Wiring connectors that went into the stereo.
- b) On the antenna adapter you need to connect both the diversity cable and the antenna cable. On some adapters you need to remove the plastic from the diversity cable on the wiring loom and slot it into the new adapter.
- c) Take the GPS antenna and feed the small cable through the left hand side of the double din console from the area where you removed the glovebox (SEE IMAGE BELOW).



- d) Plug the GPS antenna into the top right connector at the back of the RNS-E Unit
- e) Plug the antenna adapter into the bottom left connector at the back of the RNS-E Unit
- f) Connect the wiring harness to the RNS-E unit's main connector and push the RNS-E back into the dash. (if the unit won't lock into place push the cables at the back of the until down so they allow it to go all the way into the dash).
- g) There is a small gap at the under the dash on the left hand side above the fan unit which is ideal for the GPS antenna. Push the antenna into this location and if the antenna has a magnetic base it will lock into place. (See image)

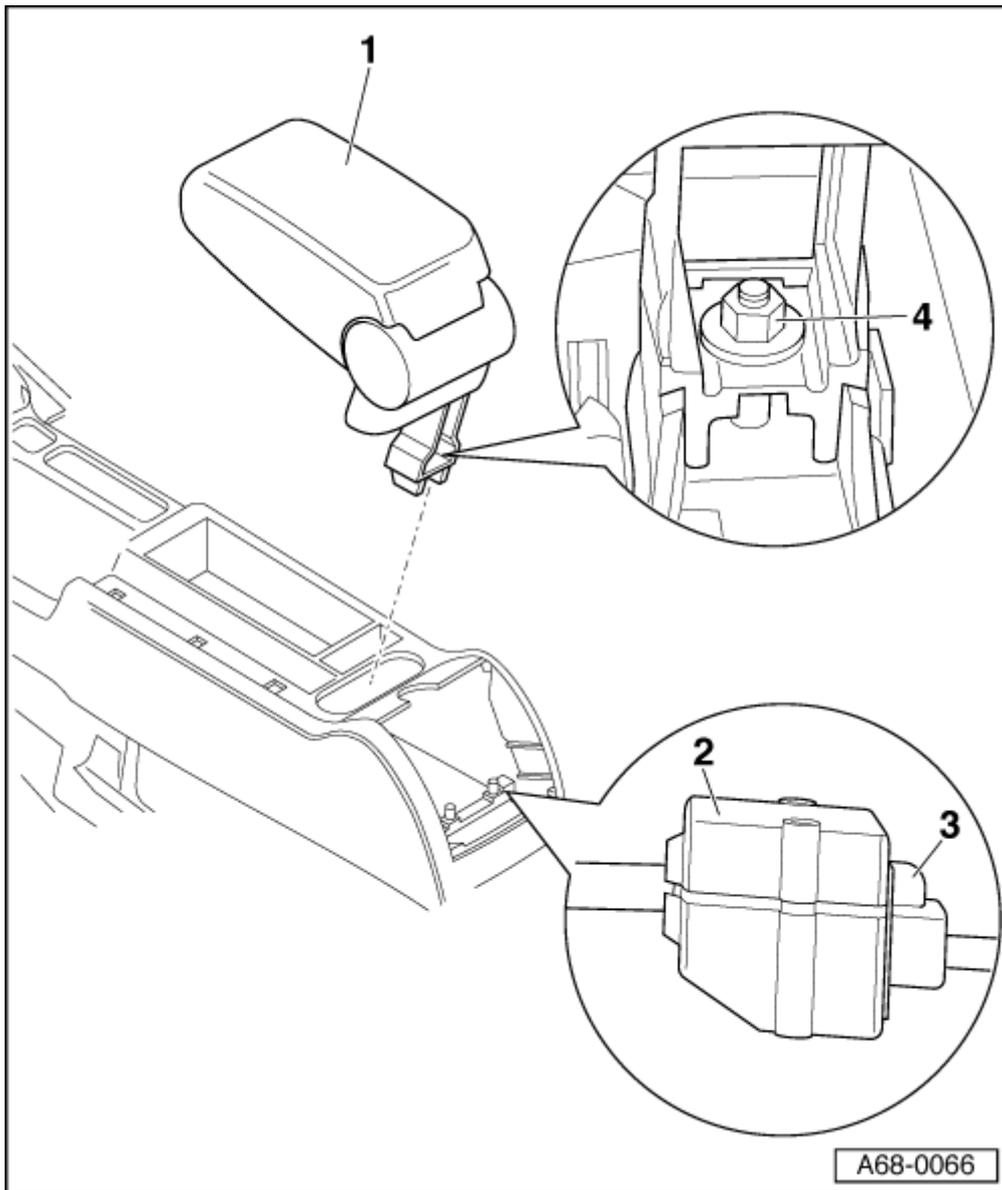


Installing RNS-E SAT NAV for Audi A4

- h) Once this is in place attach the GPS cable to the cable shown the image (Blue Arrow) using cable ties and push through some slack to the back of the RNS-E Unit in case you have to remove it in the future.
- i) Switch on the RNS-E Unit, insert the Navigation DVD and test the unit by planning a trial route.
- j) Also to see how many satellites you are click on the Nav info button when in navigation screen.
- k) Then test the sound through the speakers to make sure that is ok.

Installing RNS-E SAT NAV for Audi A4

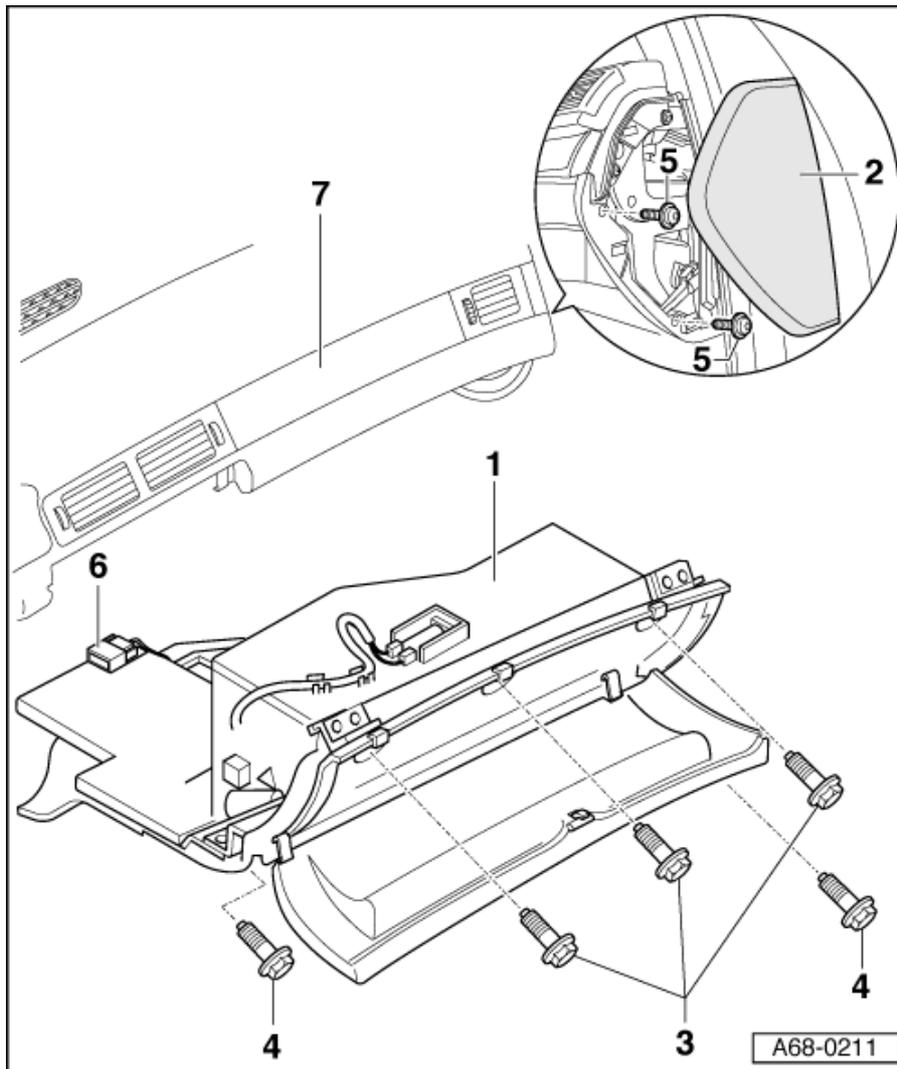
Stage 18: Install the Centre Armrest (if present)



- a) Slot Armrest -1- through the slot in the centre console.
- b) On centre armrest with telephone, connect connector -2- or any other connectors.
- c) Bolt in nut -4- in ashtray well with a 13mm Socket
- e) Reinsert the rear ashtray

Installing RNS-E SAT NAV for Audi A4

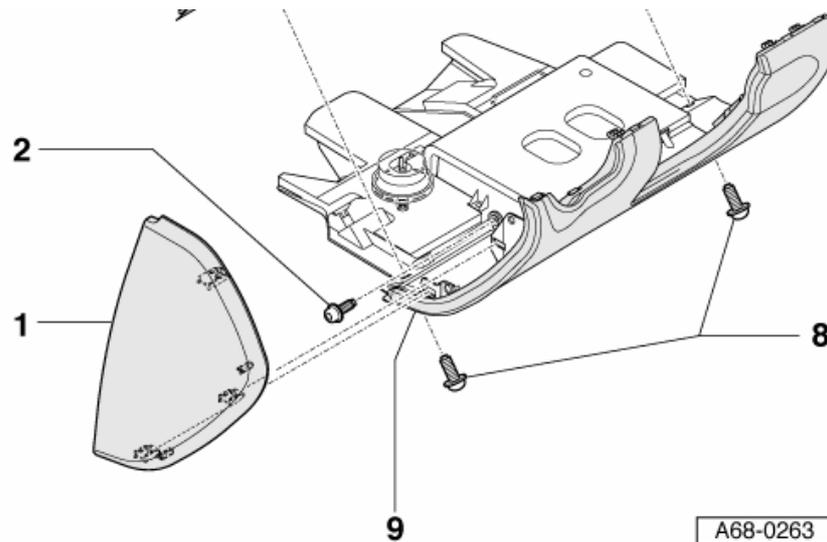
Stage 19: Reinstall the Glovebox



- Connect the glovebox connection located at the back of the glovebox.
- Connect connector for passenger airbag key switch (If present on your car)
- Feed the CD changer cable through the aperture in the dash (if applicable)
- Lift glovebox into place.
- Insert the 3 bolts -3- in recesses at top of glove compartment -1- with an 8mm socket.
- Using the same socket insert bolts -5- (2x) from the side, from the outside.
- Then use the socket to insert bolts -4- (2x) from underneath, from footwell.
- If you car has the CD changer screw in the bolt above this, connect the changer cable and push the change back into the glovebox.
- Clip panel -2- back into place.

Installing RNS-E SAT NAV for Audi A4

Stage 20: Reinstall the Driver's Storage Compartment



Note: The above picture is from a left hand drive vehicle but the principle is the same for the right had drive version.

- a) Reconnect diagnostic connector at the bottom on the right of the compartment.
- b) Connect connector on footwell light and on additional loudspeaker, if applicable
- c) Lift compartment into position
- d) Push storage compartment at top of the panel each side of the steering wheel boss until it clips in.
- e) Insert bolts in positions -2- and -8- with an 8mm socket.
- f) Clip panel -1- back into place.

**CONGRATULATIONS YOU HAVE NOW INSTALLED AN RNS-E UNIT
INTO YOUR CAR!!**