Instructions for installing a Retrofit Cruise Control Kit to;

MK4 Golf, Bora [1]]
Audi A3 [8L], TT [8N]
Seat Leon, Toledo [1M]
Skoda Octavia [1U]

All TDi Engines & Engine Codes listed on Page 9, ignore Pages 9-12

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Cruise Help & VCDS Activation Procedure

Please ensure the battery is removed before commencing any works

VAS Tool 1978 Pin Removal Tool is a <u>Laser 3932 Tool</u> approx. £8 on Amazon <u>Silverline 702445</u> is useful for wiper arm removal approx. £3 on Amazon <u>M12 spline bit</u> is required for the steering wheel hub nut

Full Photographic Fitting guide; http://vwgolfr32.co.uk/cruise control/

Most ECU's have cruise control de-activated. If this is the case, there will not be a letter "G" in the Component field of VCDS when connected to the Engine, it will show 0000SG.

[Select]
[01 - Engine]
[Login - 11]
Enter 11463 to activate cruise control
[Do It!]

After doing this procedure, Cycle the Ignition & there should be a letter "G" in the Component field & it will show G000SG.

Wire Colour / Pin Assignment for the Black T10e Connector

Blue - Pin 1

Red/Yellow Stripe - Pin 2

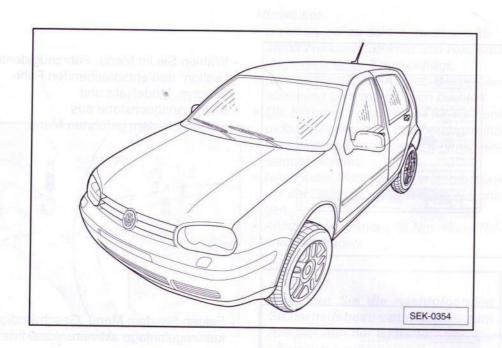
Black/Yellow Stripe - Pin 3

White - Pin 9

All TDi Engines & the Engine Codes listed on Page 9 have the ECU Pre-wired,
Please ignore Page 9 [Paragraph 2 onwards] upto Page 12,
as this covers other Petrol Engine Codes which require the ECU loom.

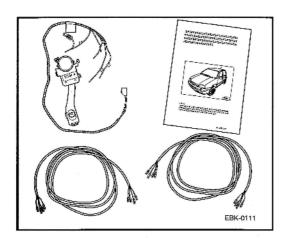
All 1.8T Engines [not all listed] need to use the following ECU Pin Locations;

 Engine code letters: ARZ, ATN, AUM, AUQ, AUS, AZD, AZH, AZJ, BCB T121/75 blue/grey T121/57 red/yellow T121/38 black/white T121/76 white Installation instructions for retrofitting a cruise control regulator in the Golf IV / Golf IV Variant TDI / petrol engine with electronic throttle control (E-Gas), Bora / Bora Variant TDI / petrol engine with electronic throttle control (E-Gas)



Note:

Due to the safety regulations which apply to the handling of airbag components, this retrofit can only be installed by partner dealerships of Volkswagen AG. Coding in the engine control unit is also required. These activities should be carried out only in a partner dealership of Volkswagen AG.



Contents of the service kit:

- 1 steering column switch (directional indicator switch with switch for CCS)
- 1 wiring harness for CCS (interior)
- 2 wiring harness for CCS
- 1 installation description

Special tools, workshop equipment, test and measuring equipment and accessories required

- Repair Manual "Body Installation Work, Interior"
- Repair manual "Electrical System"
- Folder Current Flow Diagrams, Electrical Fault Finding and Fitting Locations
- V.A.G 1332 Torque spanner (40 - 200 Nm)
- VAS 5051/B, VAS 5052 Vehicle Diagnosis, Measuring and Information System
- VAS 5053 Vehicle Diagnostic System
- VAS 1978 Wiring Harness Repair Set

Proceed as follows:

First, disconnect the battery ground cable.

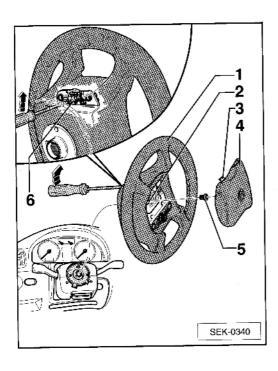
Notes:

- Please obtain the radio code before disconnecting the battery.
- For the following steps, it is essential that you follow the repair manual Body Installation Work, Interior in Chapter 69.

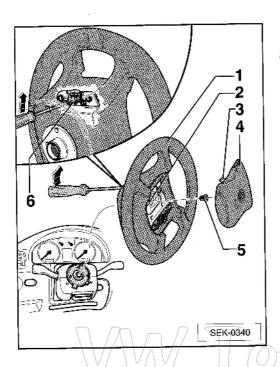
Important!

Work on the airbag system may be carried out only be trained specialists. The relevant safety requirements must be observed, see Safety Notes on the Airbag in the Repair Manual (Chapter 69).





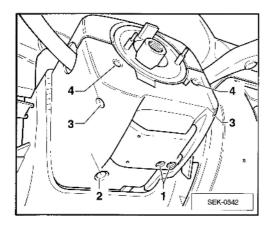
- Release the steering column adjusting mechanism.
- Pull the steering wheel **-1-** out and push it into the upper position.
- Secure the steering column adjusting mechanism.
- Turn the steering wheel -1- until the spoke of the steering wheel is vertical.
- Insert an approx. 175 mm long screwdriver into the hole in the steering wheel retainer from the rear (insert screwdriver about 45 mm).
- Push the screwdriver upwards Arrow.
 This pushes the securing clamp -6-backwards and releases the snaphook -3- on the airbag -4-.



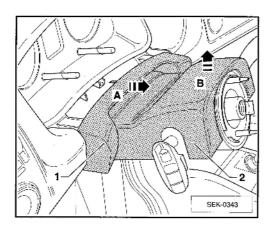
- Use the same procedure to release the hook on the other side.
- Disconnect the plug connection -2- on the airbag -4- and set it aside carefully.
- Turn the steering wheel -1- to the centre position (wheels are pointed straight ahead).
- Remove the attachment screw -5-.
- Pull the steering wheel off of the steering column.

Notes:

- The multipoint socket screw is treated with a sealant, and can be used up to five times.
- Make a punch mark after each time it is installed.
- Tightening torque 60 Nm, see repair manual.

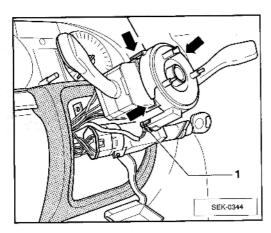


- Remove the attachment screws -2-,
 -3- and -4- on the trim of the steering column switch.
- Remove the attachment screws -1from the handle of the steering column adjusting mechanism.
- Pull off the handle and remove the lower trim for the steering column switch.



- Pull the upper trim -1- in
 the direction of the arrow A -.
 Now remove the trim top -2- in
 the direction of the arrow B from
 - the direction of the arrow B from the top.

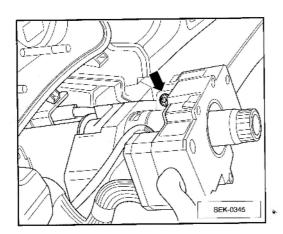
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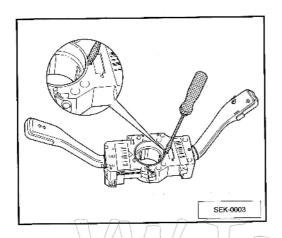
- Disconnect the plug connection -1- to the reset ring with slip ring.
- Release the securing clamps -arrowson the reset ring with slip ring and pull it off.

Note:

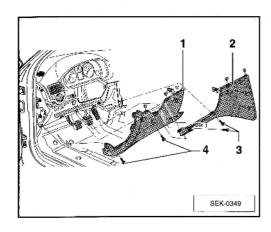
The reset ring with slip ring -F138- must not be rotated out of the centre position (secure with adhesive tape if necessary).



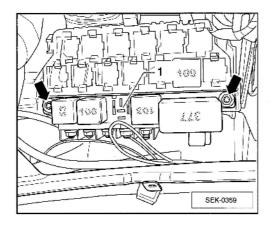
- Slacken the clamping screw for the steering column switch.
- Pull the steering column switch forwards slightly.
- Disconnect all of the plug connections to the steering column switch and remove it.
- Remove the steering column switch.



- Release the locking lug on the steering column switch with a screwdriver (see illustration).
- Pull the directional indicator switch off of the windshield wiper switch.
- Replace the directional indicator switch using the directional indicator switch with CCS contained in the service kit.



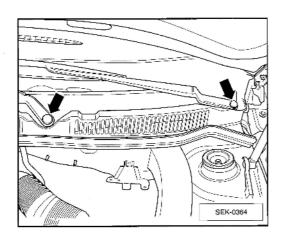
- Unclip the left-hand trim from the fuse holder on the dashboard.
- Remove the attachment screws -4-.
- Unclip the left-hand trim -1- all the way.
- Remove that attachment screws -3and unclip the right-hand trim -2-.
- Reinstall the steering column switch.
- Connect the CCS wiring harness to the directional indicator switch and fasten the wiring harness to the existing cable harness.
- Route the new wiring harness from the directional indicator switch to the central electric system in the footwell.
- Fasten the wiring harness with cable clips.



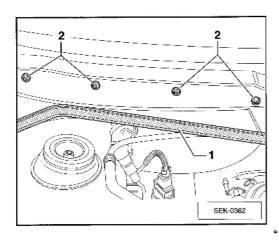
Release the fixing nuts

 arrows- and remove the relay
 board -1- together with the relay plate;
 if necessary also release the lower
 screwed connections on the relay
 plate.

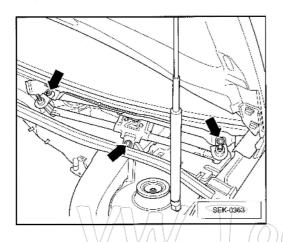




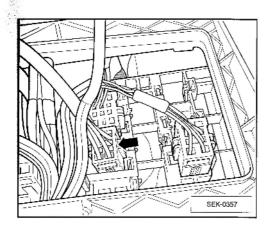
- Lever the caps **-arrows-**off of the wiper rod with a suitable screwdriver.
- Remove the fixing nuts of the wiper arms and remove the wiper arms.



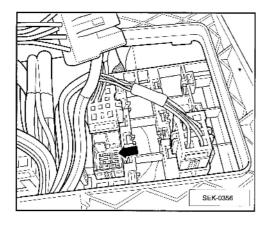
- Pull off the rubber seal -1-.
- For vehicles up to model year 1999, remove the attachment screws -2-, see Repair Manual "Electrical System".
- Remove the cover from the pollen filter.
- Unclip the trim on both sides from the fender inner.
- Carefully press the cowl upwards and out.



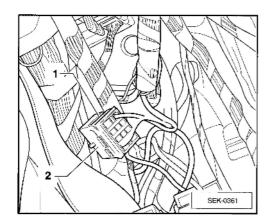
- Disconnect the connecting plug on the wiper motor.
- Remove the attachment screws (M6) -arrows- and take off the washers.
- Remove the wiper frame together with the wiper motor.



- Remove the cover on the electrical box in the reservoir.
- Separate the black 10-pin connector (T10e) **-arrow-**.

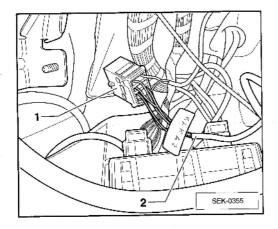


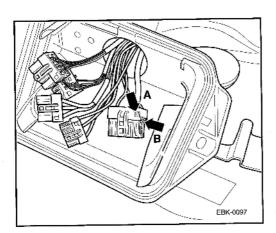
- Release the 10-pin connector (T10e) -arrow- from the bracket.



- Pull the 10-pin connector (T10e) -2through to the footwell.
- Release the lock **-1-** from the 10-pin connector (T10e) **-2-.**

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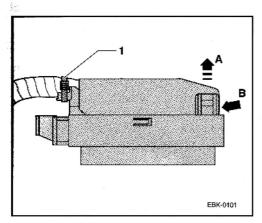


- Insert the individual connecting connecting cables (with labelled tags) of the wiring harness -2- into the corresponding chambers of the connector housing -1-.
- Refasten the lock on the connector housing.

Vehicles with petrol engine (excluding engine code letters APF, AQN, AQP, AUE, AVU, BDE, BEH, BFH, BML)

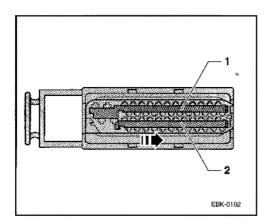
- Release the lock -arrow A- of the 10-pin connector (T10e) on the engine compartment side and slide the lock in the direction of -arrow B-.
- Insert the individual connecting wires of the supplied wiring harness (80-pole engine control unit wiring harness 1J0.971.425.B,121-pole engine control unit wiring harness 1J0.971.425.C) into the chambers in the connector housing T10e according to the following list:
- * T10e/1 blue/grey
- T10e/2 red/yellow
- T10e/3 black/white
- T10e/9 white
- Engage the connector housing lock again.
- Engage the plug (T10e) in the electrical box and connect the mating connector.
- Fit the cover on the electrical box.
- Next run the wiring harness to the engine control unit in the plenum chamber. Use cable ties to secure the wiring harness to the existing engine wiring harness.



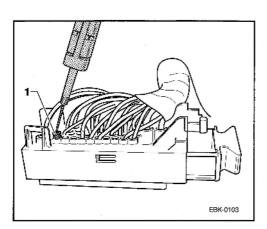


Vehicles with 80-pole engine control unit (engine code letters APE, AXP, BCA)

- Disconnect the 52-pin plug for the remaining engine wiring from the engine control unit.
- Separate the cable tie -1-.
- Press together the cover in the area of -arrow B- and fold the cover open in the direction of -arrow A-.

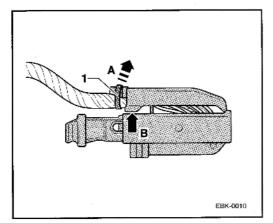


 Use a suitable screwdriver to press the locks -1- and -2- in the direction of the arrow.



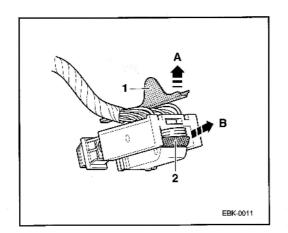
- Remove the seal -1- using a suitable ejector tool from the Wiring Harness Repair Set -1978- in accordance with the listing on page 12.



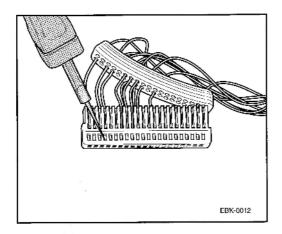


Vehicles with 121-pole engine control unit

- Disconnect the plug of the 81-pole remaining engine wiring harness from the engine control unit.
- Separate the cable tie -1-.
- Press together the cover in the area of -arrow B- and fold the cover open in the direction of -arrow A-.



- Pull out the locking device -1- of the plug in the direction of -arrow A-.
- Pull out the locking device -2- in the direction of -arrow B-.
- Next remove both plug boards from the connector housing.

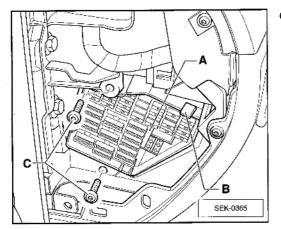


 Remove the plug contacts using a suitable ejector tool from the Wiring Harness Repair Set -1978- in accordance with the listing on page 12.



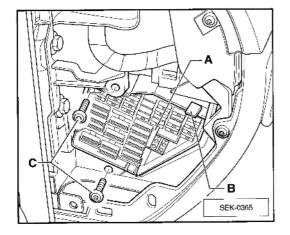
- Connect the wires to the free pins on the connector for the remaining engine wiring harness in accordance with the listing below.
- Engine code letters: BAD T121/49 blue/grey T121/51 red/yellow T121/55 black/white T121/52 white
- Engine code letters: BFQ T121/67 blue/grey T121/66 red/yellow T121/69 black/white T121/68 white
- Engine code letters: APE, AXP, BCA T80/39 blue/grey T80/25 red/yellow T80/24 black/white T80/50 white
- Engine code letters: ARZ, ATN, AUM, AUQ, AUS, AZD, AZH, AZJ, BCB T121/75 blue/grey T121/57 red/yellow T121/38 black/white T121/76 white
- Plug assembly for the remaining engine wiring harness is carried out in reverse sequence.



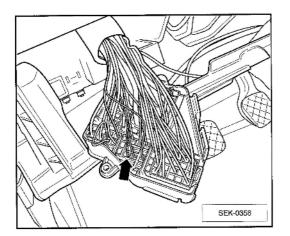


Vehicles with petrol engine or diesel engine

- Remove the attachment screws -Cfrom the fuse holder.
- Press the locking devices -B- and pull the fuse holder -A- into the footwell.

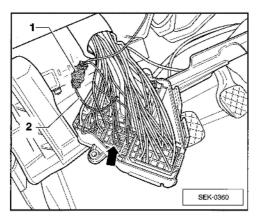


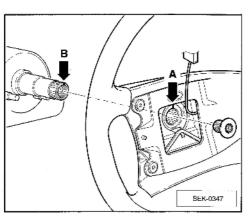
- Pull fuse -5- out of the fuse holder.
- On the rear, release the cable -arrow-leading out of fuse chamber 5 using the stripping tool VAS 1978/4. Clip the cable into the individual connector housing of the CCS wiring harness.



 Connect the short connecting cable (black/blue) -arrow- from wiring harness for CSS to fuse chamber -5-.







- Clip cable -2- together with connector into the connector housing -1-.
- Re-insert fuse -5- and install fuse holder.
- Secure loose wiring harnesses with appropriate cable clips.

Further assembly is carried out in reverse sequence. Please observe the following notes:

Notes:

- It must be ensured that the distance between the steering wheel and the reset ring is <u>at least 3 mm</u>.
- The markings -A- and -B- on the steering column and steering wheel must be in alignment.
- The attachment screw for , the steering wheel is treated with a sealant, and can be used up to five times.
- Make a punch mark on the attachment screw after each time it is installed.
- Tightening torque 60 Nm, see repair manual.

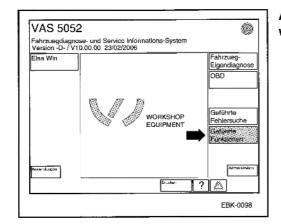
Important!

Before connecting the battery, observe the following safety regulations:

- There must be no persons in the vehicle
- Switch on ignition
- Close doors
- Connect battery

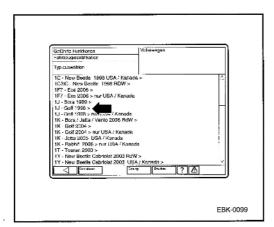
Note:

After the engine control unit has been coded, a test drive must be carried out to check that the CCS is functioning properly (e.g. check that the CCS switches off when the clutch pedal or brake pedal is pressed).

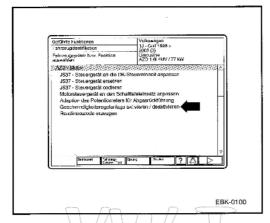


Activating the cruise control system with VAS 5051/5052:

- -Before activating the cruise control system, interrogate the CCS error log.
- Connect tester VAS 5051/5052 to diagnostic connection with cable VAS 5052/3A and switch on tester VAS 5051/5052.
- Press the button for "Guided Function"
 -arrow- on the display.



- In the "Vehicle identification" menu, select the relevant vehicle type, model year and engine code letters.
- Follow the guided menu.



Follow the menu
 "Activating/deactivating the cruise control system".

Note:

After the engine control unit has been activated, a test drive must be carried out to check that the CCS is functioning properly (e.g. check that the CCS switches off when the clutch pedal or brake pedal is pressed).