

Instructions for installing a Retrofit Cruise Control System to a Audi A4 (8E) & A6 (4F)

Please note: Lowline Steering Controller Part Numbers: 8E0-953-549-F & 8E0-953-549-S will not accept the cruise coding.

VAG-COM Activation Procedure;

Activating Cruise Control via ECU:

[Select]

[01 - Engine]

[Login - 11]

Enter 11463 to activate cruise control

[Do It!]

2.0 TFSI and 3.2 FSE Engines require Long Coding;

Byte 06 Special Functions II

Bit 0 Cruise Control installed

Steering Controller coding:

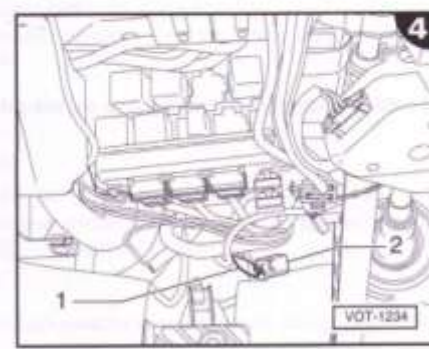
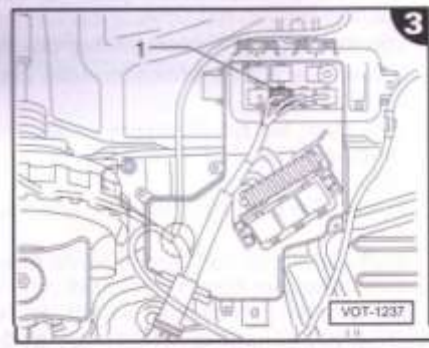
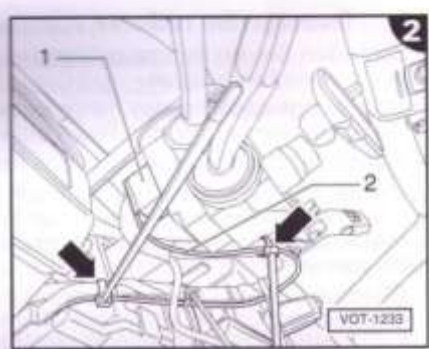
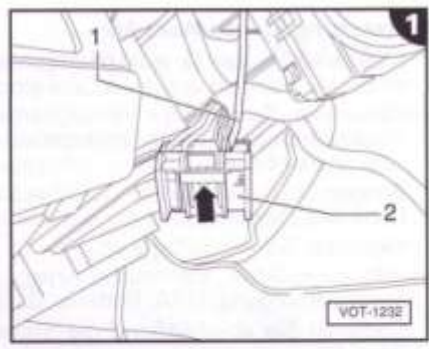
A4; http://wiki.ross-tech.com/wiki/index.php/Audi_A4_%288E%29_Steering_Wheel#Coding

A6; http://wiki.ross-tech.com/wiki/index.php/Audi_A6_%284F%29_Steering_Wheel_Electronics#Coding

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Assembly Instructions

Original automatic cruise control system (ACC), Audi A4/A6

Set contents:

- ◆ 1 x ACC switch
- ◆ 2 x screws
- ◆ 1 x sticker set
- ◆ 1 x assembly instructions
- ◆ 1 x control unit for steering column electronic system ¹⁾
- ◆ 1 x control system cable ²⁾
- ◆ 7 x cable ties ²⁾

¹⁾ only supplied with original ACC parts no. 4F0 054 691, 8E0 054 691, 8E0 054 691 A

²⁾ only supplied with original ACC parts no. 4F0 054 691, 8E0 054 690

Accessories

- ◆ 1 x lower trim for steering column switch ³⁾
- ³⁾ not included in the set contents, please order separately noting the colour code of the interior fittings.

Special tools, test and measuring equipment, and ancillaries required:

- ◆ Flat-tip screwdriver
- ◆ Phillips screwdriver
- ◆ Torx Allen keys (set)
- ◆ Set of combination wrenches
- ◆ V.A.G 1332 dynamometric key
- ◆ Vehicle diagnosis, measurement and information system

1 Procedure:



Note

- ◆ A competent workshop should install the original ACC system. Special tools and the accompanying literature specific to the car are required for fitting it. Incorrect fitting may lead to damage to the vehicle or to the ACC system.
- ◆ When the original ACC system has been fitted, the control system for the steering column electronics and the engine control system will have to be coded for operation with the ACC system using a vehicle diagnostics, measuring and information system. The vehicle diagnosis system must be used to co-ordinate the vehicle product numbers in the central database, in order to avoid problems with software versions later on. Please use the function 050 050.
- ◆ The work to be performed described in these fitting instructions may change due to model servicing schedules. For example, changes to the wiring colours or even the fitting sites should not be discounted. For this reason, always consult the relevant up-to-date wiring diagram or the current vehicle repair manual.
- ◆ All rights to make technical changes reserved.

Component fitting, Audi A6 => page 15

1.1 Component fitting, Audi A4

- Disconnect the battery.
- => Vehicle electronics, electrical system; repair group 27; starter motor, power supply, ACC, battery, connecting and disconnecting the battery
- Remove the steering wheel.
- => Bodywork; interior bodywork tasks; repair group 69; passenger protection, repair airbag driver side; remove and fit steering wheel
- Fit the ACC switch supplied to the steering column switch installed in the vehicle.
- => Vehicle electrical system; electrical system; Repair Group 94; exterior lights, lamps and switches; steering column switch module; remove and install switch for ACC -E45-

Audi A4 with non-ACC-compatible control system for steering column electronics only ⁴⁾:

⁴⁾ Original automatic cruise control system part nos. 8E0 054 691, 8E0 054 691 A

- Replace the steering column electronics control unit already installed in the vehicle with the control unit supplied.
- => Vehicle electrical system; electrical system; Repair Group 94; exterior lights, lamps and switches; steering column switch module; remove and install control unit for steering column electronics -J527-

Continue for all Audi A4:

- Fit the steering wheel, following the instructions in reverse order. Replace the lower trim for the steering wheel switch.
- => Bodywork; interior bodywork tasks; repair group 69; passenger protection, repair airbag driver side; remove and fit steering wheel
- Stick the "ACC" sticker supplied where it can be seen somewhere near the diagnosis connector.
- Connect the battery.
- => Vehicle electronics, electrical system; repair group 27; starter motor, power supply, ACC, battery, connecting and disconnecting the battery

- Finally, code the control units to activate the ACC.

⇒ 1.3 Coding the control units, page 16

1.2 Component fitting, Audi A6

- Disconnect the battery.
- ⇒ Vehicle electronics, electrical system; repair group 27; starter motor, power supply, ACC, battery, connecting and disconnecting the battery
- Remove the steering wheel.
- ⇒ Bodywork; interior bodywork tasks; repair group 69; passenger protection, repair airbag driver side; remove and fit steering wheel
- Remove the shelf on the driver's side.
- ⇒ Bodywork; interior bodywork tasks; repair group 68; interior fittings; shelves/covers; remove and fit shelf, driver's side
- Fit the ACC switch supplied to the steering column switch installed in the vehicle.
- ⇒ Vehicle electrical system; electrical system; Repair Group 94; exterior lights, lamps and switches; steering column switch module; remove and install switch for ACC -E45-

Audi A6 with non-ACC-compatible control system for steering column electronics only ⁵⁾:

⁵⁾ Original automatic cruise control system part nos. 4F0 054 691

- Replace the steering column electronics control unit already installed in the vehicle with the control unit supplied.
- ⇒ Vehicle electrical system; electrical system; Repair Group 94; exterior lights, lamps and switches; steering column switch module; remove and install control unit for steering column electronics -J527-

Audi A6 without control cable only ⁶⁾:

⁶⁾ Original automatic cruise control system part nos. 4F0 054 691, 8E0 054 690

Page 3 - figure 1

- Release the coloured latch -arrow- on the connector -2- of the steering column switch module.
- Click the contact on the control system cable -1- supplied into connector chamber 5 -2-.
- Secure the coloured latch -arrow- on the connector -2- of the steering column switch module.

Page 3 - figure 2

- Click connector -1- into the steering column switch module.
- Secure the control cable -2- to the existing wires with cable ties -arrows-.

Page 3 - figure 3

Note

The illustration shows the connector -1- from the driver's footwell.

- Dismantle the radiator tank E-box on the driver's side, until you can release and disconnect the white plug-in connector -1-.
- ⇒ Vehicle electronics, electrical system; repair group 97; wires; relay housing, fuse housing; remove and fit radiator tank E-box, driver's side.

Page 3 - figure 4

- Click the contact on the control system cable -1- supplied into chamber 10 of the white plug-in connector -2-.
- Push the white plug-in connector -2- into the radiator tank E-box coupling station until you hear it engage.
- Secure the control cable -1- to the existing wires with cable ties.
- Replace the shelf on the driver's side.
- ⇒ Bodywork; interior bodywork tasks; repair group 68; interior fittings; shelves/covers; remove and fit shelf, driver's side

Continue for all Audi A6:

- Fit the steering wheel, following the instructions in reverse order. Replace the lower trim for the steering wheel switch.
- ⇒ Bodywork; interior bodywork tasks; repair group 68; passenger protection, repair airbag driver side; remove and fit steering wheel
- Stick the "ACC" sticker supplied where it can be seen somewhere near the diagnosis connector.
- Connect the battery.
- ⇒ Vehicle electronics, electrical system; repair group 27; starter motor, power supply, ACC, battery, connecting and disconnecting the battery
- Finally, code the control units to activate the ACC.
- ⇒ 1.3 Coding the control units, page 16



1.3 Coding the control units

- Connect a vehicle diagnosis, measurement and information system to the vehicle.
 - ⇒ Manual for the vehicle diagnosis, measurement and information system or the repair guidelines for the vehicle.
 - Query the vehicle fault memory.
- If the ESP lamp is lit up and if the fault memory contains steering angle sensor fault 00778 with the comment "no or incorrect basic setting," the steering angle sensor -G85- must be retaught.
- Recalibrate the steering angle sensor using the assisted troubleshooting system.
 - Using the assisted troubleshooting system, code the engine control unit (001) and the control unit for the steering column electronics (016) for operation with ACC.
 - Delete all the vehicle fault memories.
 - Take a short test drive to check that the ACC is functioning correctly.
 - Connect a vehicle diagnosis, measurement and information system to the vehicle when you return to the workshop.
 - Inspect the vehicle's fault memory.
 - Following the inspection, co-ordinate the components installed with your tester. To update the vehicle database, use function 050 050.
- On successful completion of the function, the vehicle is stored in the database at Audi with the updated function.