

Remote Key Adaptation and Programming

Ignition keys, matching to radio wave remote control

If new or additional ignition keys are required they must be matched to the immobilizer and convenience system control electronics.

The matching procedure must always be carried out for all the ignition keys, including the existing ones.

The number of keys already matched will be displayed when the adaptation (matching) function is selected

With the introduction of this generation of convenience system it is possible to program additional functions.

The V.A.G 1551 dealership number (workshop code) will be stored in immobilizer control module when matching ignition keys.

Key Adaptation Procedure as follows:

Insert correct profile ignition key in the ignition lock.

Connecting scan tool (VAG 1552 – iScan – VAS 5052)

The adaptation shown here is only an example.

Adaptation is performed with the VAG 1552. Use of the iScan is similar using the reference chart (see Library Document)

Connect to Convenience Module Address Word 46

Press buttons -1- and -0- (10 selects function "Adaptation").

Confirm entry with the -Q- button.

Press buttons -0- and -0- (all buttons are erased with channel number 00).

Confirm entry with the Q button.

NOTE!

It is not possible to match a new or additional key(s) without erasing existing learned/matched key(s).

All learned values for keys WILL be erased when this is performed.

Indicated on display:

Adaptation	Q
Erase learned values	

Confirm entry with the -Q- button

Indicated on display:

Adaptation	→
Learned values are erased	

Press → button.

Indicated on display:

Rapid data transfer	HELP
Select function XX	

Press buttons -1- and -0- (10 selects function "Adaptation")

Indicated on display:

Rapid data transfer	Q
10 - Adaptation	

Confirm entry with the -Q- button

Indicated on display:

Adaptation	
Enter channel number XX	

Press buttons -0- and -1- (all keys are "learned" with channel number 01)

Indicated on display:

Adaptation	Q
Enter channel number 01	

Confirm entry with the -Q- button

Indicated on display:

Channel 1.....Adaptation 1	→
Key 1	<-1 3->

The top line displays number of keys to be "learned" (standard =1). Select number of keys with buttons 1 and 3.

Press → button

Indicated on display:

Channel 1.....Adaptation 1	→
Enter matching value XXXXX	

Press the -0- button four times and then enter the number of all ignition keys to be matched, including the existing key, (e.g. 00003); maximum possible quantity of 4 keys.

Press → button

Indicated on display: Number of radio wave key to be "learned".

Channel 1 Adaptation 3	Q
Key 3	<-1 3->

Confirm entry with the -Q- button.

Indicated on display:

Channel 1 Adaptation 3	Q
Store amended value?	

Confirm entry with the -Q- button

Indicated on display:

Channel 1 Adaptation 1	→
Amended value is stored	

Press → button.

Indicated on display:

Rapid data transfer	HELP
Select function XX	

A button must be pressed once, for at least 1 second, on each of the radio wave keys to be "learned" (in example above, 3 keys).

Switch off ignition and remove ignition key

Perform functional check (e.g. 3) of radio wave keys

All 3 keys (see example) can be "learned" in one matching sequence

15 seconds must not be exceeded when matching all ignition keys (pressing a button).

A successful adaptation can be determined via Read Measuring Value Block, function 08, Data Block number 013

When operation the radio wave unit both of first measurement values must have the status OK. Simultaneously the last measurement value will show the positional number of the button (i.e. first, second, third, fourth button).

If the remote control button is operated several times the third display -no measured value- changes to "OK".

The matching of ignition keys is automatically terminated when:

- number of keys to be matched is reached
- a button of one of the keys to be "learned" is pressed frequently
- Permissible matching period of 15 seconds is exceeded (DTC is stored).

Permissible matching period of 15 seconds is exceeded (DTC is stored)

New additional key, matching

From model year 1999

- Insert a correct profile ignition key (old) in the ignition switch/lock.
- Switch on ignition
- Lock the vehicle mechanically (driver's door) with a new key (to be learned) and then operate one of the radio wave keys on the key.
- Then after a pause of more than one second operate the radio wave key on the key a second time.
- The adaptation process is completed and will be confirmed by the vehicle horn sounding.

Radio wave remote control function variations, vehicles through 05.98

The various functions listed in the table can be called up and adapted by selecting the channel numbers 03 to 10

Channel number	Relevance	Measured value
03	Auto-lock ²⁾	on=1 off=0
04	Auto-unlock ²⁾	on=1 off=0
05	IM switch-off ¹⁾	on=1 off=0
08	unlock = turn signals flash	on=1 off=0
09	lock = turn signals flash	on=1 off=0
10	Settings Alarm horn	1=Rest Euro. 2=Germany 3=GB

¹⁾ Interior monitoring

²⁾ The vehicle will be locked at a speed of 15 km/h (approx. 9.5 MPH)

³⁾ The vehicle will be locked at a speed of 15 km/h (approx. 9.5 MPH) and unlocked when ignition key is removed

Radio wave remote control functional variations, vehicles from 06.98 on

The various functions listed in the table can be called up and adapted by selecting the channel numbers 03 to 10

Channel number	Significance	Measured value
03	Auto lock/unlock: Vehicles will be locked when a speed of 15 km/h is reached	on=1 off= 0
04	Auto lock/unlock: Vehicles will be unlocked when the ignition key is withdrawn from the ignition lock	on=1 off= 0
05	IM switch-off: Interior monitoring is activated or deactivated by operating central locking closed twice	on=1 off= 0
06	Horn sounds when unlocking: Confirmation signal when unlocking ¹⁾	on=1 off= 0
07	Horn sounds when locking: Confirmation signal when locking ¹⁾	on=1 off= 0
08	Turn signals flash when unlocking: Unlocking is confirmed by turn signals flashing twice	on=1 off= 0
09	Horn sounds when locking: Locking is confirmed by turn signals flashing once	on=1 off= 0
10	Setting for alarm horn: Programming the horn operation when the alarm is triggered appropriate to the legislation of the countries	1= Rest of Europe 2= Germany 3= Great Britain

The matching shown here is only an example.

Indicated on display:

Rapid data transfer	HELP
Select function XX	

Press buttons -1- and -0- (10 selects function "Adaptation").

Indicated on display:

Rapid data transfer	Q
10 - Adaptation	

Confirm entry with the -Q- button

Indicated on display:

Adaptation	
Enter channel number XX	

Press buttons -0- and -8- (channel number 08 switches the turn signals on or off when unlocking).

Indicated on display:

Adaptation	Q
Enter channel number 08	

Confirm entry with the -Q- button.

Indicated on display:

Channel 8 Adaptation 1	→
Unlock Flashing on <-1 3->	

Press → button.

Indicated on display:

Channel 8.....Adaptation 1	
Enter adaptation value XXXXX	

Press button -0- five times (e.g. 00000).

Indicated on display:

Channel 8.....Adaptation 0	Q
Enter adaptation value 00000	

Confirm entry with the -Q- button

Indicated on display:

Channel 8 Adaptation 0	Q
Unlock Flashing off <-1 3->	

Confirm entry with the -Q- button.

Indicated on display:

Channel 8 Adaptation 0	Q
Store amended value?	

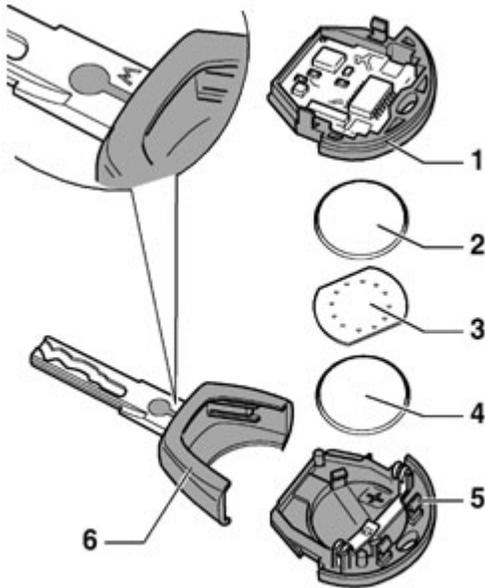
Confirm entry with the -Q- button

Indicated on display:

Channel 8 Adaptation 0	→
Amended value is stored	

Press → button

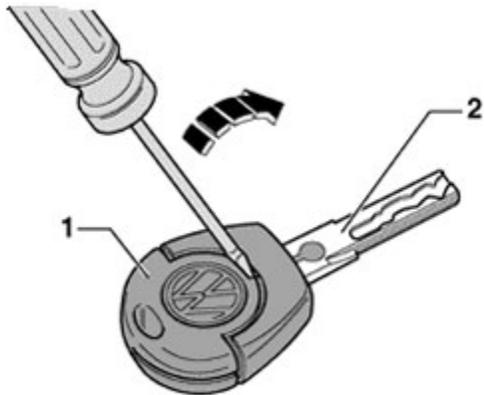
Batteries for the main key with radio wave remote control Removing and Installing



- 1 - Transmitter unit - upper part (turned-over)
- 2 - Key battery
- 3 - Contact plate
- 4 - Key battery
- 5 - Transmitter unit - lower part
- 6 - Main key with variable code transponder

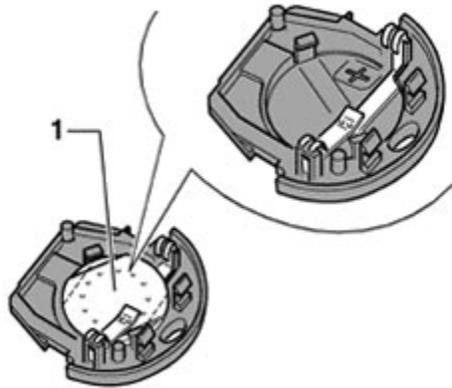
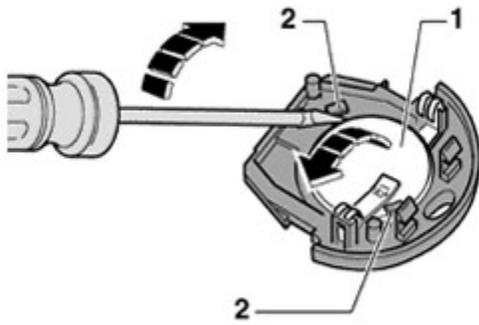
To be able to differentiate between a key with transponder and a key with variable code transponder the main key has a "w" stamped on it

To remove the batteries from the remote key:

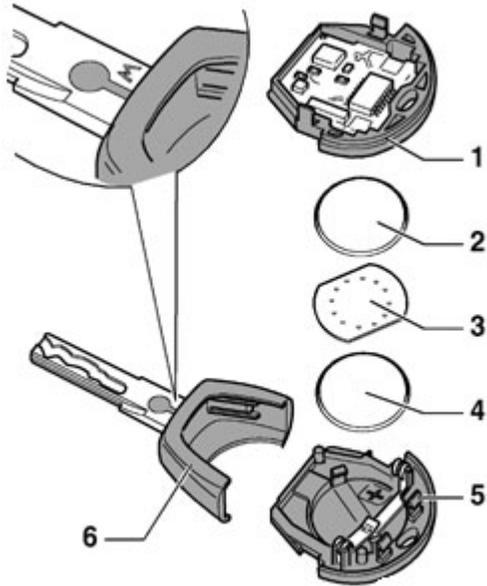


- Insert a screwdriver in the slot between the transmitter unit -1- and the main key -2-.
- Move the screwdriver in direction of arrow and unclip the transmitter unit from the main key

Lever the transmitter unit apart on the two locating lugs (arrows).



- The contact plate -1- has two straight edges. When these edges are turned towards the retainers the contact plate can be removed.
- The contact plate can also be unclipped with a screwdriver.
- Now unclip the lower battery from the retainers with a screwdriver.

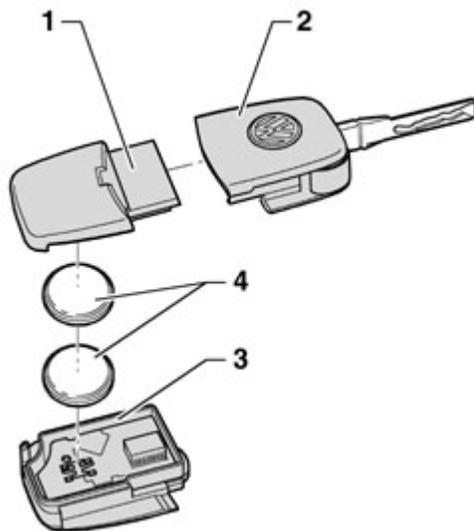


Note the polarity and correct position when installing the batteries.

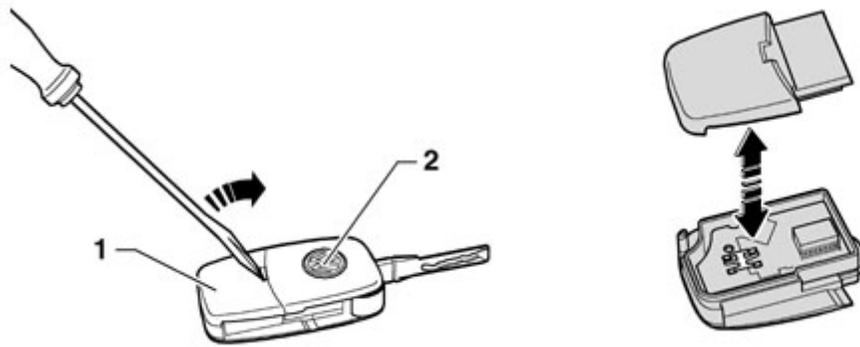
- Place the battery -4- with the positive terminal downwards into the sensor unit (positive terminal is marked on housing).
- Now place the contact plate -3- on the battery -4-.
- Place battery -2- with the positive terminal downwards onto the contact plate and secure.
- Place sensor unit -1- and sensor unit -5- together and clip together.
- Then engage the transmitter unit with the main key

Batteries for the main key (folding) with radio wave remote control

Removing and Installing

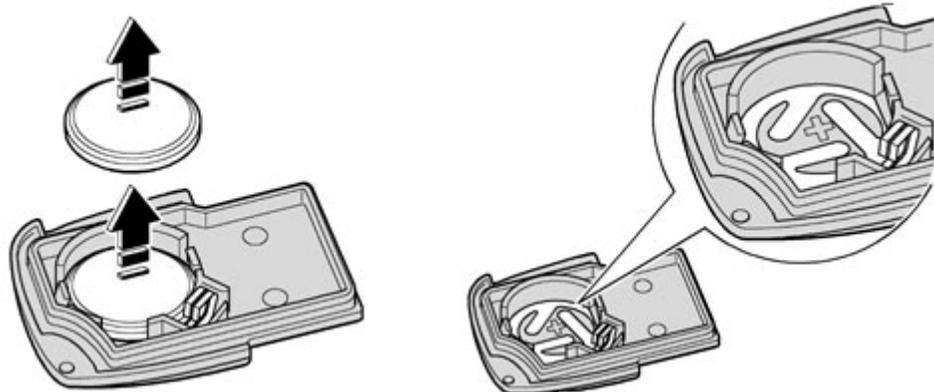


1 - Transmitter unit - upper part (turned-over)



Insert a screwdriver in the slot between the transmitter unit -1- and the main key -2-. Move the screwdriver in direction of arrow and unclip the transmitter unit from the main key.

Press the transmitter unit apart in direction of arrow



Unclip batteries from the retainers in direction of arrow using a screwdriver.

Installing

Note the polarity and correct position when installing the batteries.

- Place the battery with the positive terminal downwards into the sensor unit (positive terminal is marked on housing).
- Engage battery in transmitter body by pressing down lightly.
- Install cover on transmitter body (do not damage seal).
- Then engage the transmitter unit with the main key.