Adapting ignition keys

**Notes:**

- If new or additional ignition keys are required they must be adapted to the immobilizer control unit.
- The ignition keys for the immobilizer described here are marked with a "W"!
- Note procedure when changing the locking set and the immobilizer control unit.
- The adaption procedure must always be carried out for all the ignition keys, including the existing ones.
- The number of keys already adapted will be displayed when the adaption function is selected.
- If only one key is adapted, the vehicle can be started immediately with this key. If more than one key has been adapted, the vehicle can only be started immediately with the last key adapted.
- The adaption procedure can be interrupted by pressing the C key on the V.A.G 1551.

**Warning!**
The V.A.G 1551 dealership number (workshop code) will be stored in immobilizer control unit when adapting ignition keys.

**Prerequisites**

- All ignition keys available. If no old ignition key is available see "Lost key procedure", ⇒ page 01-388.
- Secret number is available; if not see "Establishing secret number", ⇒ page 01-388.

- Insert correct profile ignition key in the ignition lock.
- Connect fault reader V.A.G 1551, select operating mode 1 "Rapid data transfer", switch on ignition and enter address word 17 "Dash panel insert".

Job number: 900036
Chassis number: Registration number: User: M
Date: 08/04/2002
Workshop Manual - 1 -
After displaying the immobilizer identification:
- Press ⇒ key.

- Press key 1 twice. (11 selects the "Login procedure" function.)

- Enter secret number, when doing this place a 0 before the 4 digit number (e.g. 01915).
- Confirm entry with key Q.

- Press keys 1 and 0. (10 selects the "Adaption" function.)
- Confirm entry with key Q.

Notes:
- If the following display appears:
  ◆ Secret number is not accepted. Enter again.
  ◆ 3 attempts to enter the secret number are possible immediately, the next 3 attempts are only permitted after a minimum of 10 minutes if the ignition remains switched on during this time and the self-diagnosis is exited via the function 06 "End output".
  ◆ The waiting period between each 3 attempts doubles each time up to a maximum of 255 minutes.

- Confirm entry with key Q.
Adaption
Enter channel number XX

⇐ Indicated on display:
- Press keys 2 and 1. ("channel 21" is selected with 21.)
- Confirm entry with key Q.

⇒ Function is unknown or cannot be carried out at the moment

⇐ If the following display appears:
- Repeat adaption by entering secret number.

Channel 21........Adaption 2

⇐ Indicated on display:
The top line of the display shows that 2 ignition keys are adapted to the system.
- Press ⇒ key.

Channel 21........Adaption 2

⇐ Indicated on display:
- Press the 0 key four times and then enter the number of all ignition keys to be adapted, including the existing key, (e.g. 00003); max. possible Qty. 8.
- Confirm entry with key Q.

⇒ Channel 21 Adaption 3 Q

⇐ Indicated on display for 3 ignition keys to be adapted:
- Confirm entry with key Q.

⇒ Channel 21 Adaption 3 Q

⇐ Indicated on display:
- Confirm entry with key Q.

⇒ Channel 21 Adaption 3 Q

⇐ Indicated on display:
Amended value is stored

Dash panel insert VDO:

Job number 900036
Chassis number
Registration number
User M
Date 08/04/2002
Workshop Manual - 3 -
The warning lamp K117 goes out.

The key in ignition/starter lock is now adapted.
- Press ⇒ key.
- Switch off ignition.
- Insert next key in ignition/starter lock and switch on ignition again.

The warning lamp K117 lights up for approx. 2 seconds and then goes out.
- As soon as immobilizer warning lamp -K117- in dash panel insert goes out, switch ignition off again.
- Repeat this procedure until all keys are adapted.

After the last ignition key is adapted, the warning lamp -K117- flashes once briefly signifying the adaption sequence is completed.

**Notes:**
- If the warning lamp flashes the key adaption is faulty and must be performed again.
- If longer than 60 seconds is taken when all keys are being matched, the warning lamp will flash quickly; the time is not registered when the ignition is switched off.

The adaption of ignition keys is automatically terminated when:
- number of keys to be adapted is reached.
- an already adapted key is used to switch on the ignition again and the ignition remains switched on for longer than 1 second (fault is stored)
- Permitted adaption period of 60 seconds is exceeded (fault is stored) after switching ignition on using the 2nd key.

- Select function 02 "Interrogate fault memory". If there is no fault stored, the adaption of the keys has been successfully completed.
Step II: use instructions for W wire communication ONLY (NOT data bus communication)

UPDATE: other instructions have been removed because of their irrelevance
W wire procedure:

- Insert authorized key in the ignition lock.

- Connect fault reader V.A.G 1551, switch on ignition, select operating mode 1 "Rapid data transfer" and enter address word 17 "dash panel insert".

After the control unit identification has been displayed:

- Press ⇒ key.

```
Rapid data transfer  HELP
Select function XX
```

⇒ Indicated on display:

- Press key 1 twice. (11 selects the "Login procedure" function.)

```
Rapid data transfer  Q
11 - Login procedure
```

⇒ Indicated on display:

- Confirm entry with key Q.

```
Login procedure  Q
Enter code number XXXXX
```

⇒ Indicated on display:

- Enter secret number, when doing this place a 0 before the 4 digit number (e.g. 01915).

- Confirm entry with key Q.

```
Rapid data transfer  HELP
Select function XX
```

⇒ Indicated on display:

**Notes:**

⇒ Will be indicated briefly on display:

- Secret number is not accepted. Enter again.

- 3 attempts to enter the secret number are possible immediately, the next 3 attempts are only permitted after a minimum of 10 minutes if the ignition remains switched on during this time and the self-diagnosis is exited via the function 06 "End output".

- The waiting period between each 3 attempts doubles each time up to a maximum of 255 minutes.
- Press keys 1 and 0. (10 selects the "Adaption" (matching) function.)

Indicated on display:
- Confirm entry with key Q.

Adaption
Enter channel number XX

Indicated on display:
- Press key 0 twice. (00 selects "Channel 0").
- Confirm entry with key Q.

Adaption
Erase learnt value?

Indicated on display:
- Confirm entry with key Q.

Adaption
Learnt values are erased

Indicated on display:
- Press ⇦ key.

Rapid data transfer
Select function XX

Indicated on display:
- Switch off ignition.

Notes:

Ignition must be switched on again after a max. 60 seconds.

When ignition is next switched "on" the identification of the engine control unit is read by the control electronics of the immobilizer control unit and stored.

The engine must not be started for about two minutes.
Be especially careful about those «little things», like not switching the engine on for 2 mins (Notes)