

CONTENTS

1 CAUTION ON TESTING VW AIRBAG.....	2
2 ERASING LEARNT VALUES	2
3 ADAPTING ECU TO THROTTLE VALVE	4
4 ADAPTING EXHAUST GAS RECIRCULATION	7
5 AUTOMATIC TRANSMISSION BASIC SETTING	8
6 SERVICE LIGHT RESET.....	11
7 REMOTE FOB CLEARING/MATCHING	13
8 INSTRUMENTS MODULE RECODING	17
9 ZERO POSITION OF STEERING ANGLE SENSOR	19
10 FUEL LEVEL INDICATOR ADAPTATION	21
11 AIR BAG DEACTIVATE/ACTIVATE	22
12 INSTRUMENT CLUSTER LANGUAGE.....	24
13 AC/HEATING BASIC SETTINGS	25
14 CODING NEW AIRBAG CONTROL MODULES	26

LAUNCH

1 Caution on testing VW Airbag

2000-2001 Golf/GTI/Jetta/Beetle Airbag System (important!)

Air Bag Warning Lights stay on permanently after testing with X431. The Air Bag Controller shows DTC number 65535, indicating an internal error which cannot be cleared

This problem seems to be limited to airbag controllers with the part number 6Q0-909-605-A. If

you have a 2000-2001 Golf, Jetta/Bora, Beetle, or a similar SEAT or Skoda model, you should

physically inspect the airbag controller and look at the part number. If it is not 6Q0-909-605-A,

then it should be safe to scan. If it is 6Q0-909-605-A, then it is at risk of this problem -- please

avoid scanning the airbag controller in these cars, unless you are prepared to buy a new one!

if you unintentionally connect to the Airbag controller with the part number 6Q0-909-605-A,

please immediately click [exit] to quit. If you insist on doing the following tests, the company will

disclaims the responsibility for all the result which will be produced. Accessing the other control

modules in the car should not affect the airbag controller in any way.

Comment: There is no way that testing a controller should cause it to become dysfunctional in

this manner. We believe there is a bug in the firmware in these controllers. We also believe

VW knows this, but isn't admitting it. The affected controllers are no longer available as replacement parts, they have been superceded by a new part number -- 1C0-909-605-A which

appears not to have this problem.

2 Erasing Learnt Values

Old learnt values are erased from Engine ECU

Make Sure That:

Battery Voltage >11.5V

No Fault Codes stored in Engine ECU

Coolant Temp 5 to 115 °C

Throttle Valve at Idle Position

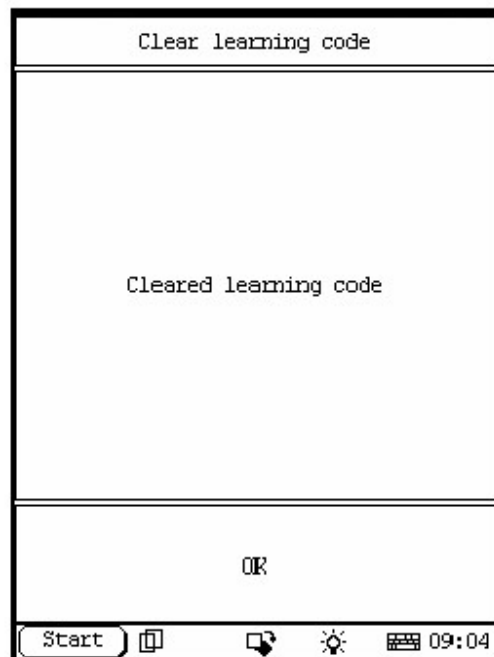
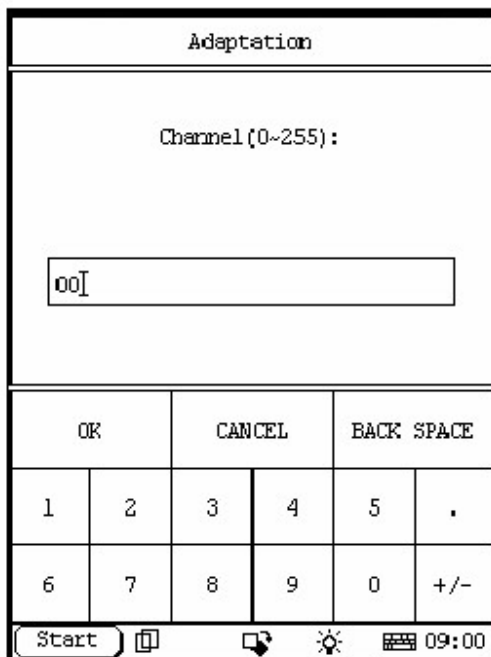
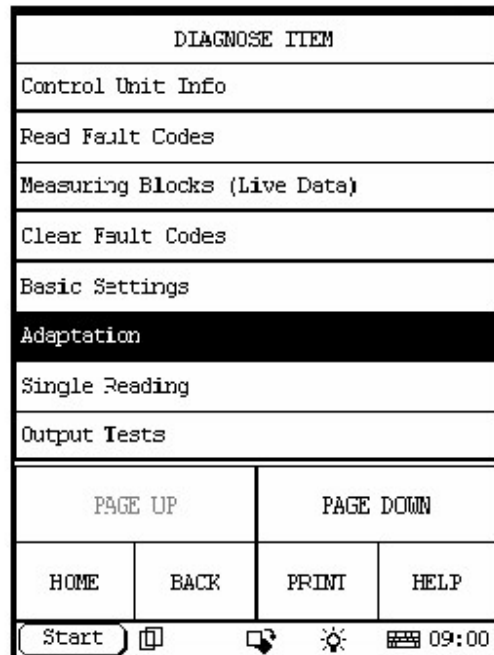
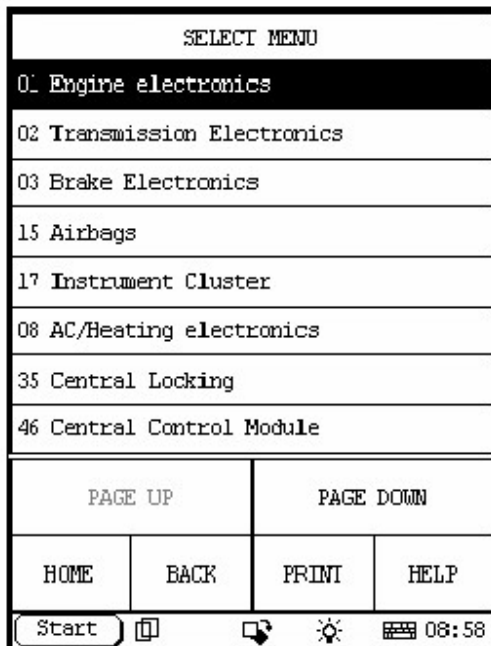
Ignition on, engine not running

Procedure:

Ignition on, engine not running

Select

(01 Engine Electronics)



- Enter Channel No. '00'
- Press (OK)
- X431 Screen will display [Cleared learning code]
- Press (OK)
- Press (BACK) To Exit from Module
- Switch off ignition for at least 20 seconds to store the values.

3 Adapting ECU to Throttle Valve

Make Sure That:

Battery Voltage >11.5V

No Fault Codes stored in Engine ECU

Coolant Temp 5 to 115 °C

Throttle Valve at Idle Position

Ignition on, engine not running

Procedure:

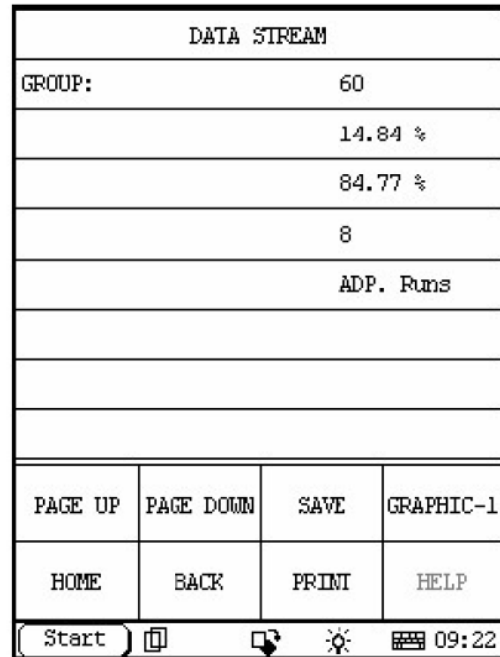
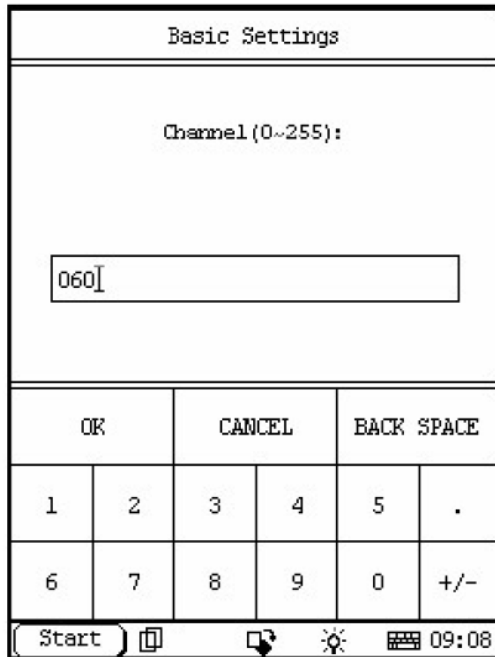
Ignition on, engine not running

Select

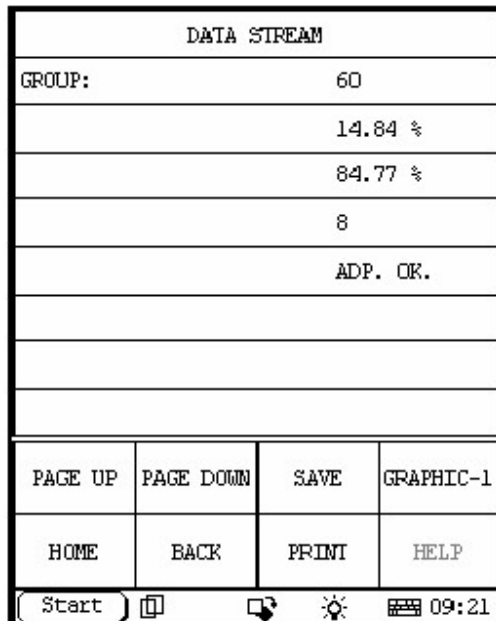
(01 Engine Electronics)

SELECT MENU			
01 Engine electronics			
02 Transmission Electronics			
03 Brake Electronics			
15 Airbags			
17 Instrument Cluster			
08 AC/Heating electronics			
35 Central Locking			
46 Central Control Module			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
Start			08:58

DIAGNOSE ITEM			
Control Unit Info			
Read Fault Codes			
Measuring Blocks (Live Data)			
Clear Fault Codes			
Basic Settings			
Adaptation			
Single Reading			
Output Tests			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
Start			09:08



Enter '098' or '060' on drive by wire systems
Press (OK)



The values will now change, Value 4 the lower right will change from ADP RUN to ADP.OK.

(Note: If No Values are shown you are using the wrong channel number)

This shows the Throttle Body adaptation is being done.

Press (BACK) and (BACK) again to Exit from Module

Switch off ignition for at least 15 seconds to store values

On Older Cars

Make Sure That:

Battery Voltage >11.5V

No Fault Codes stored in Engine ECU

Coolant Temp 5 to 115 °C

Throttle Valve at Idle Position

Ignition on, engine RUNNING

Procedure:

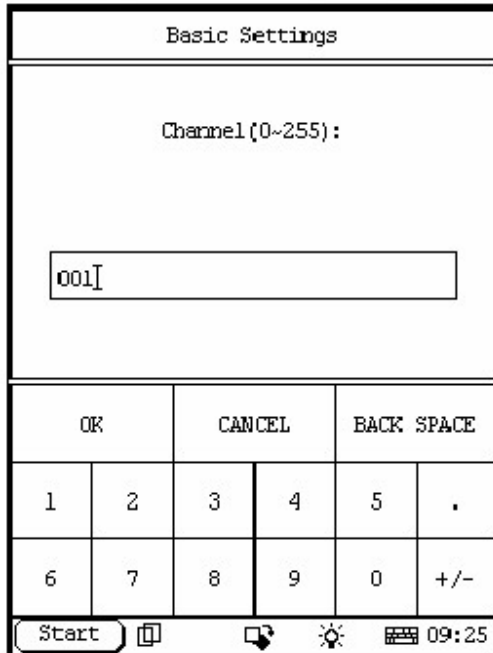
Ignition on, engine RUNNING

Select

(01 Engine Electronics)

SELECT MENU			
01 Engine electronics			
02 Transmission Electronics			
03 Brake Electronics			
15 Airbags			
17 Instrument Cluster			
08 AC/Heating electronics			
35 Central Locking			
46 Central Control Module			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
Start			08:58

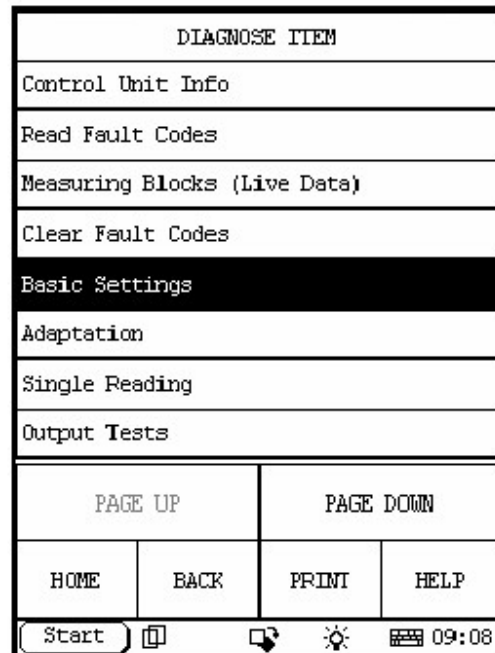
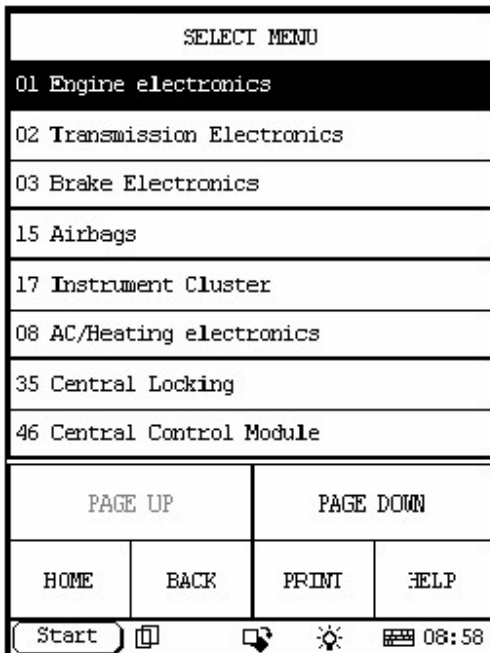
DIAGNOSE ITEM			
Control Unit Info			
Read Fault Codes			
Measuring Blocks (Live Data)			
Clear Fault Codes			
Basic Settings			
Adaptation			
Single Reading			
Output Tests			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
Start			09:08



Enter '001', Press (OK)
 Let engine Idle for at least 30 seconds.

4 Adapting Exhaust Gas Recirculation

Procedure:
 Select
 (01 Engine Electronics)



Basic Settings					
Channel(0~255):					
074					
OK		CANCEL		BACK SPACE	
1	2	3	4	5	.
6	7	8	9	0	+/-
Start [Icons] 09:27					

DATA STREAM			
GROUP:	74		
	14.84 %		
	84.77 %		
	8		
	ADP. Runs		
PAGE UP	PAGE DOWN	SAVE	GRAPHIC-1
HOME	BACK	PRINT	HELP
Start [Icons] 14:25			

Enter '074', Press (OK)

DATA STREAM			
GROUP:	74		
	14.84 %		
	84.77 %		
	8		
	ADP. OK.		
PAGE UP	PAGE DOWN	SAVE	GRAPHIC-1
HOME	BACK	PRINT	HELP
Start [Icons] 14:22			

The values will now change, Value 4 the lower right will change from ADP RUN to ADP.OK.

Press (BACK) And (BACK) again to Exit from Module

Switch off ignition for at least 15 seconds to store values.

5 Automatic Transmission Basic Setting

This relearns the kick-down point

Basic Settings should be performed on an Automatic Transmission after:

Auto Transmission Replacement

Engine replacement

ECU replacement

Throttle Valve adjustment or TPS replacement

Make Sure That:

No Fault Codes are stored

Ignition on, engine NOT running

Procedure:

Select

(01 Engine Electronics)

SELECT MENU			
01 Engine electronics			
02 Transmission Electronics			
03 Brake Electronics			
15 Airbags			
17 Instrument Cluster			
08 AC/Heating electronics			
35 Central Locking			
46 Central Control Module			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
(Start)	[Icon]	[Icon]	[Icon] 08:58

DIAGNOSE ITEM			
Control Unit Info			
Read Fault Codes			
Measuring Blocks (Live Data)			
Clear Fault Codes			
Basic Settings			
Adaptation			
Single Reading			
Output Tests			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
(Start)	[Icon]	[Icon]	[Icon] 09:08

(Basic Settings)

Basic Settings					
Channel(0~255):					
063					
OK		CANCEL		BACK SPACE	
1	2	3	4	5	.
6	7	8	9	0	+/-
Start [] [] [] [] 09:48					

DATA STREAM			
GROUP:	63		
	14.84 %		
	84.77 %		
	ADP. Runs		
	ADP. Runs		
PAGE UP	PAGE DOWN	SAVE	GRAPHIC-1
HOME	BACK	PRINT	HELP
Start [] [] [] [] 09:59			

Enter '063', Press (OK)

DATA STREAM			
GROUP:	63		
	14.84 %		
	84.77 %		
	ADP. OK.		
	ADP. OK.		
PAGE UP	PAGE DOWN	SAVE	GRAPHIC-1
HOME	BACK	PRINT	HELP
Start [] [] [] [] 09:54			

Value 3 and 4 will display Operate Kick Down
 Press accelerator pedal all the way to the floor and hold for 5 seconds. Value 3 and 4 should change from ADP.RUNS to ADP.OK
 Press (BACK) And (BACK) again To Exit from Module
 Release the Accelerator pedal.

On Older Cars

Procedure:

Select

(02 Transmission Electronics)

SELECT MENU			
01 Engine electronics			
02 Transmission Electronics			
03 Brake Electronics			
15 Airbags			
17 Instrument Cluster			
08 AC/Heating electronics			
35 Central Locking			
46 Central Control Module			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
Start			10:01

DIAGNOSE ITEM			
Control Unit Info			
Read Fault Codes			
Measuring Blocks (Live Data)			
Clear Fault Codes			
Basic Settings			
Adaptation			
Single Reading			
Output Tests			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
Start			09:08

(Basic Settings)

Basic Settings					
Channel(0~255):					
<input type="text" value="00"/>					
OK		CANCEL		BACK SPACE	
1	2	3	4	5	.
6	7	8	9	0	+/-
Start			14:27		

Enter '000', Press (OK)

Press accelerator pedal all the way to the floor and hold for 5 seconds.

Press (BACK) And (BACK) again To Exit from Module
Release the Accelerator pedal.

6 Service Light Reset

Procedure:

Select
(17 Instrument Cluster)

SELECT MENU			
01 Engine electronics			
02 Transmission Electronics			
03 Brake Electronics			
15 Airbags			
17 Instrument Cluster			
08 AC/Heating electronics			
35 Central Locking			
46 Central Control Module			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
(Start)	[]	[]	[] 10:07

DIAGNOSE ITEM			
Control Unit Info			
Read Fault Codes			
Measuring Blocks (Live Data)			
Clear Fault Codes			
Basic Settings			
Adaptation			
Single Reading			
Output Tests			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
(Start)	[]	[]	[] 10:08

(Adaptation)

Adaptation					
Channel(0~255):					
02[]					
OK		CANCEL		BACK SPACE	
1	2	3	4	5	.
6	7	8	9	0	+/-
(Start)	[]	[]	[]	[]	[] 10:08

Enter '02'

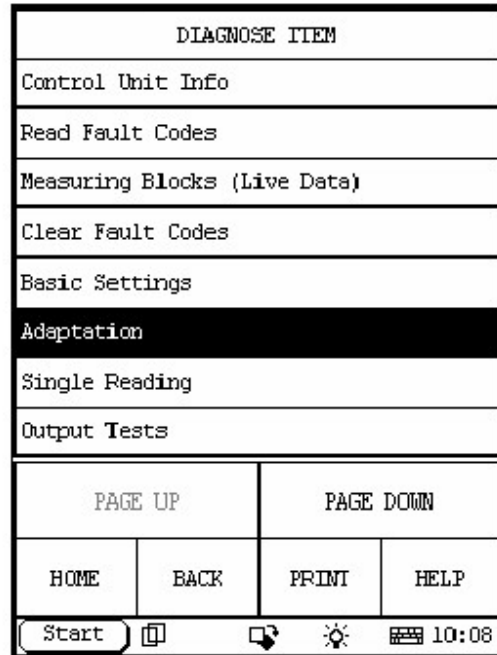
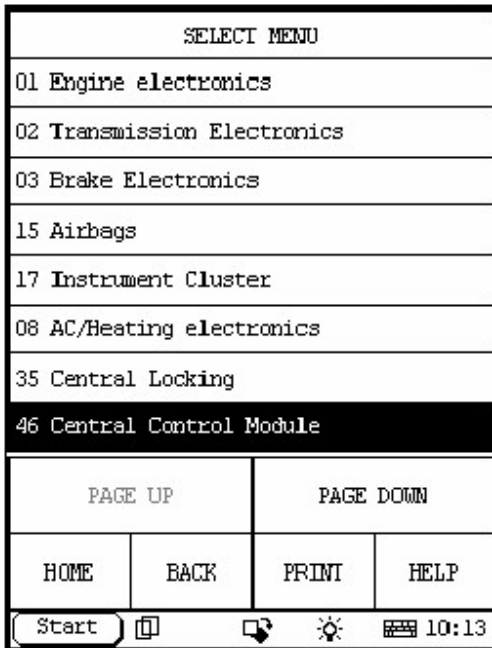
Adaptation		
GROUP:	2	
Adaptated number:	1	
PAGE UP	PAGE DOWN	PRINT
< OK	CANCEL	+ - >
Start		10:10

Adaptation		
GROUP:	2	
Adaptated number:	0	
PAGE UP	PAGE DOWN	PRINT
< OK	CANCEL	+ - >
Start		10:11

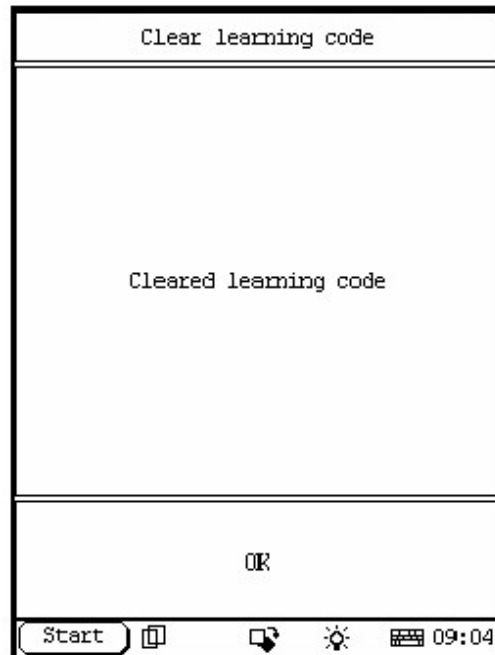
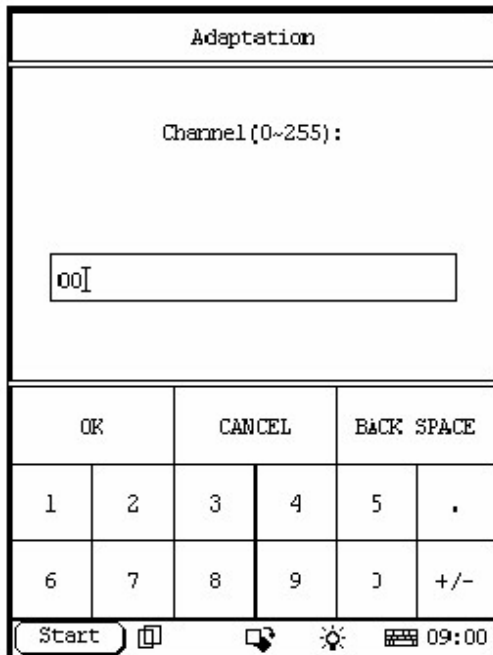
X431 Screen will display
 [GROUP: 2]
 [Adaptated number: 1]
 Press (-) and Adaptated number: will change to 0
 Press (OK)
 X431 Screen will Display [Adaptation success!]
 Press (BACK) To Exit from Module
 Service Light has now been Reset.

7 Remote Fob Clearing/Matching

Procedure for matching remote control fobs.
 To Delete previous Remote fobs
 Procedure:
 Select
 (46 Central Control Module) for VW



(Adaptation)



In channel Enter '00',Press (OK)
 X431 Screen will Display [Clear Learned values]

To Match new Remote Fobs
 VW
 Procedure
 Select
 (46 Cent Control Module)

SELECT MENU			
01 Engine electronics			
02 Transmission Electronics			
03 Brake Electronics			
15 Airbags			
17 Instrument Cluster			
08 AC/Heating electronics			
35 Central Locking			
46 Central Control Module			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
Start			10:13

DIAGNOSE ITEM			
Control Unit Info			
Read Fault Codes			
Measuring Blocks (Live Data)			
Clear Fault Codes			
Basic Settings			
Adaptation			
Single Reading			
Output Tests			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
Start			10:08

(Adaptation)

Adaptation					
Channel(0-255):					
<input type="text" value="01"/>					
OK		CANCEL		BACK SPACE	
1	2	3	4	5	.
6	7	8	9	0	+/-
Start					10:18

In Channel enter '01',press[OK],

Adaptation	
GROUP:	1
Adaptated number:	0
PAGE UP	PAGE DOWN
PRINT	
< OK	CANCEL + - >
Start	10:20

Adaptation	
GROUP:	1
Adaptated number:	1
PAGE UP	PAGE DOWN
PRINT	
< OK	CANCEL + - >
Start	10:23

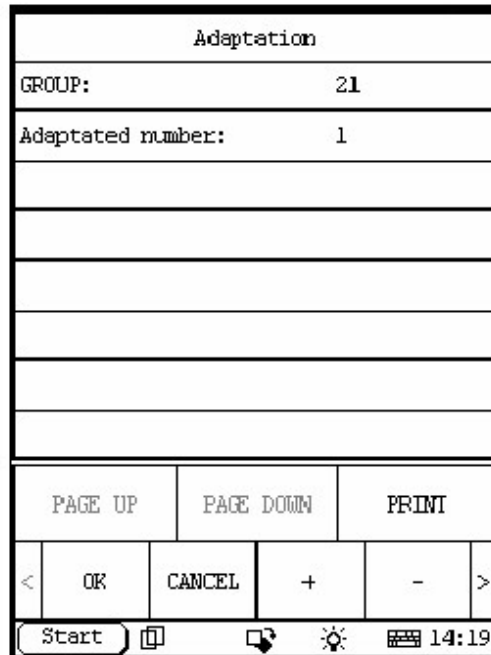
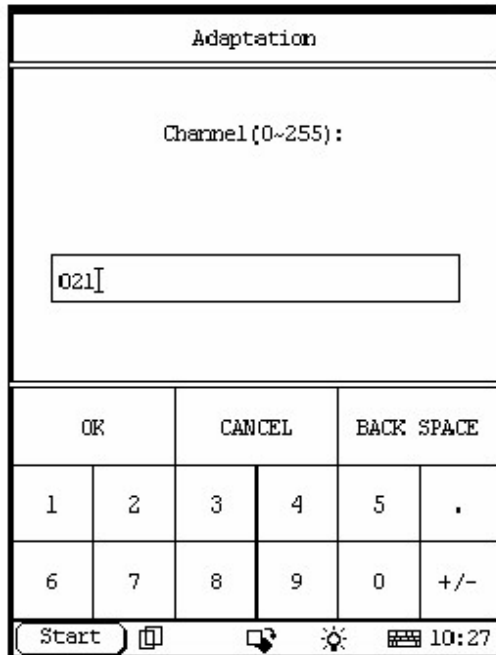
Press + to add key Adaptated number will change to 1
 Press Remote Fob, X431 Display will change to [Key recognised]
 Press (OK)
 Exit Control Module and check Remote Fob operation

Audi
 Procedure
 Select
 (46 Cent Control Module) or (35 Central Locking)

SELECT MENU			
01 Engine electronics			
02 Transmission Electronics			
03 Brake Electronics			
15 Airbags			
17 Instrument Cluster			
08 AC/Heating electronics			
35 Central Locking			
46 Central Control Module			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
Start	10:13		

DIAGNOSE ITEM			
Control Unit Info			
Read Fault Codes			
Measuring Blocks (Live Data)			
Clear Fault Codes			
Basic Settings			
Adaptation			
Single Reading			
Output Tests			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
Start	10:08		

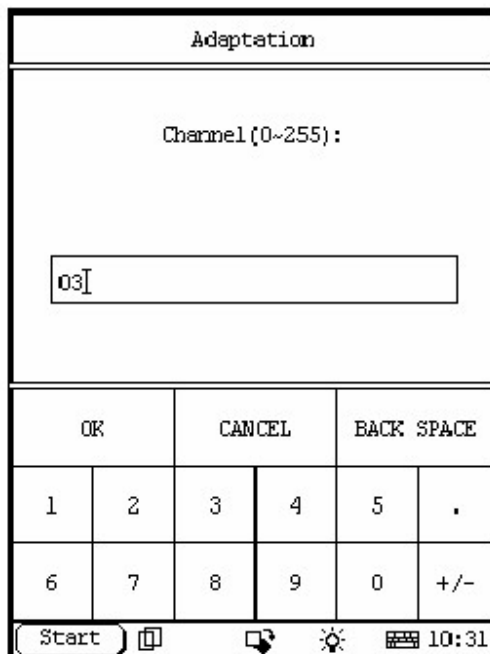
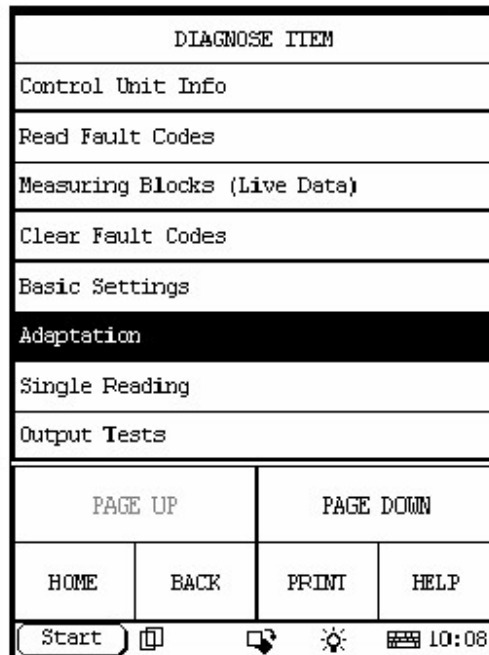
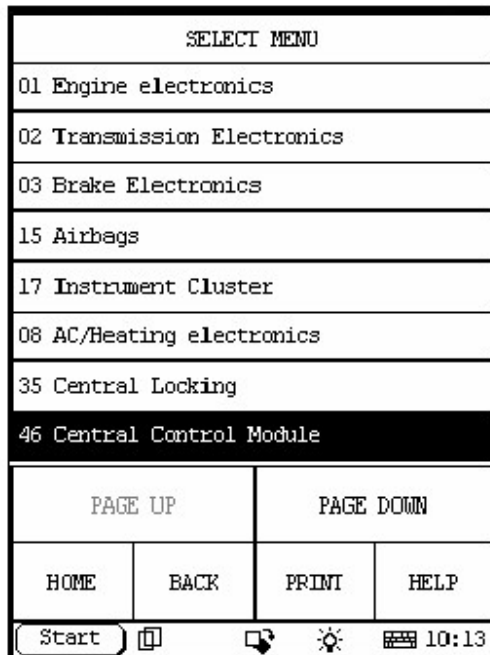
(Adaptation)



In Channel enter '21'
 Display will show [Key learn]
 Press + for amount of keys to add [Adaptated number:] will change

Press Remote Fob
 Display will change to [Key recognised]
 Press OK
 Exit Control Module and check Remote

On some later models 99>
 Procedure
 Turn Ignition on
 With Other key lock the driver's door using the key
 Press the unlock button remote
 Wait 6 seconds
 Press unlock button again
 Vehicle horn will sound when remote programmed
 On some Modules To Check if remote fob has been programmed in
 Go to (Measuring Blocks)



In Channel enter '03'
 Press remote fob Value 4 should change.

8 Instruments Module Recoding

Recoding
 Select
 (17 Instruments)

SELECT MENU			
01 Engine electronics			
02 Transmission Electronics			
03 Brake Electronics			
15 Airbags			
17 Instrument Cluster			
08 AC/Heating electronics			
35 Central Locking			
46 Central Control Module			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
Start			10:32

DIAGNOSE ITEM			
Control Unit Info			
Read Fault Codes			
Measuring Blocks (Live Data)			
Clear Fault Codes			
Basic Settings			
Adaptation			
Single Reading			
Output Tests			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
Start			10:33

(Control Unit Info)

Write down or print current ECU Coding

DIAGNOSE ITEM			
Code Module			
Login			
Chassis Number adjustment			
Readiness			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
Start			10:34

Code Module			
ECU CODE<=127			
ECU CODE<=32000			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
Start			10:34

- Press (OK)
- Select (Page Down)
- Press (Code module)

Enter 5 digit code from below

First two digits of coding is for Optional Equipment

00 No available equipment

01 Brakepad wear sensor warning active

02 Seatbelt warning active

04 Washer fluid level warning active

16 Navigation System

Third digit of coding is Country Code

1 Europe(EU) (Changes to Km,24 hour clock)

2 USA (Miles,12 hour clock)

3 Canada (Km,12 hour clock)

4 Great Britain (Miles,24 hour clock)

5 Japan (Km,24 hour clock)

6 Saudi Arabia (Km,24 hour clock)

7 Australia (Km,24 hour clock)

Fourth digit is Number of Cylinders

3 No Service Interval (2002+ models)

4 4 Cylinders

5 5 Cylinders

6 6 Cylinders

Fifth digit is Number of Travel Impulses

0 TDI Engine

1 4358

2 3538

3 4146

4 3648

LAUNCH

For example:

Code Module					
Code control unit:					
01241					
OK		CANCEL		BACK SPACE	
1	2	3	4	5	.
6	7	8	9	0	+/-
Start					10:35

9 Zero Position of steering angle sensor

To be done if steering angle sender, control unit or the steering column is replaced. Zero position compensation for steering angle sender must be performed with an accuracy of 5 degrees.

If below faults are Stored also do this Procedure

[00778 Steering Angle Sensor -G85 Mechanical Fault]

[01826 Steering Angle Sensor -G85 Voltage Supply Terminal 30]

Procedure

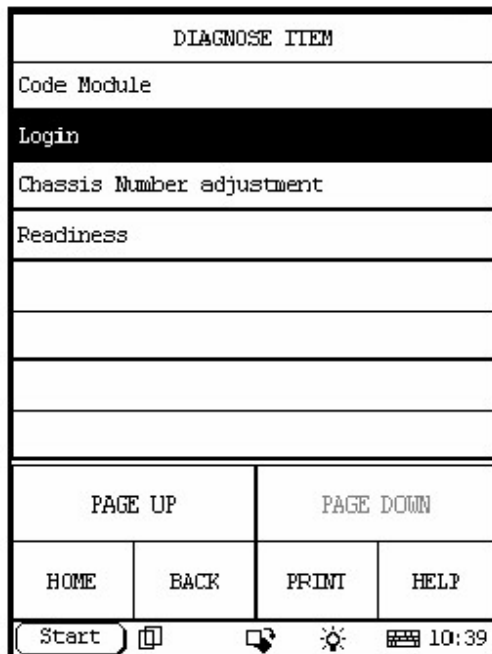
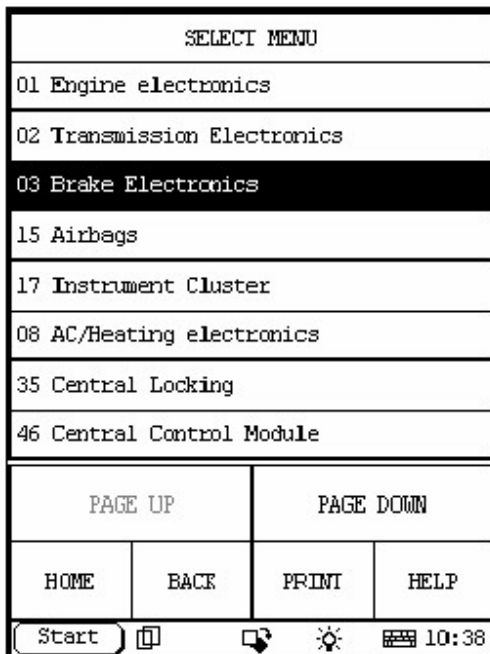
Start vehicle

Turn steering wheel one turn to the right and one turn to the left then centre.

Do not switch off ignition

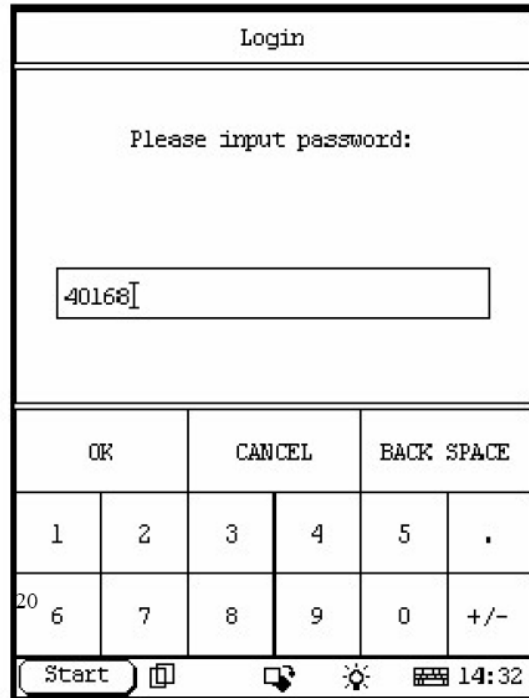
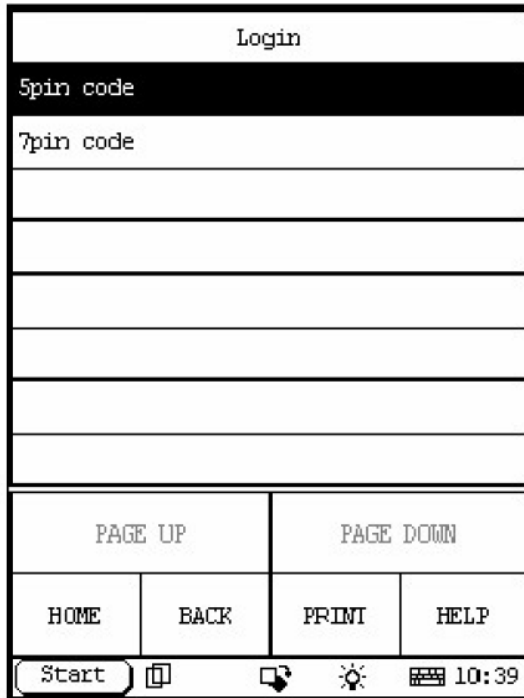
Select

(03 Brake Electronics)

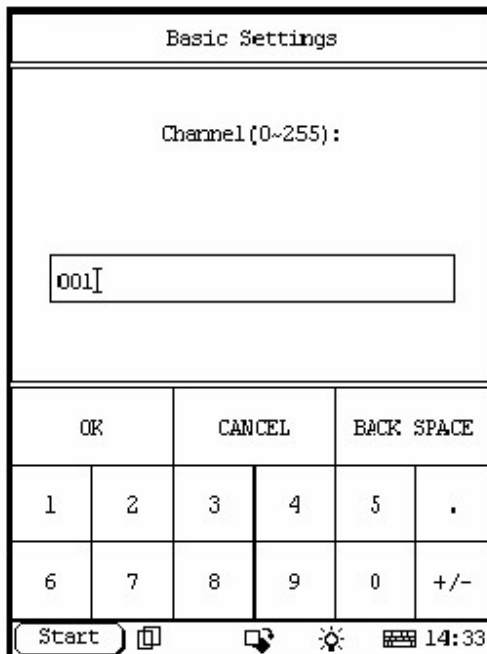
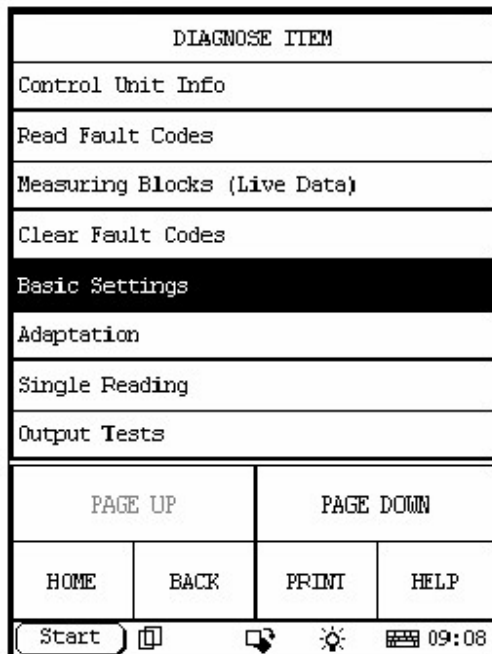


(Login)

For (5pin code)



enter '40168'
 If correct [Login Success] is displayed
 If wrong Login code is used [Login failed] is displayed
 Go back to main menu
 Select (Basic Settings)



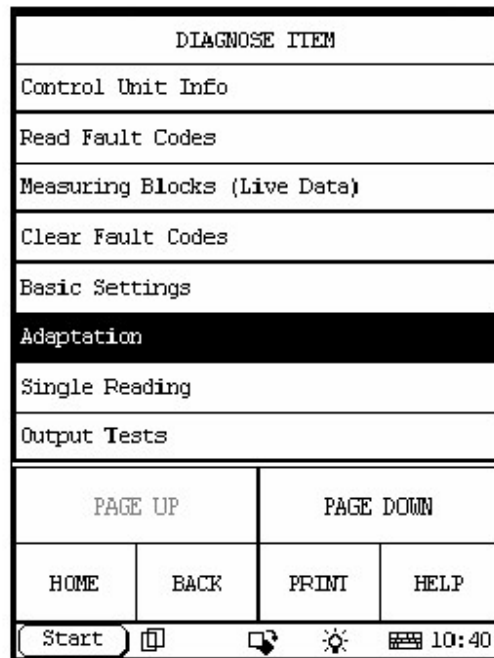
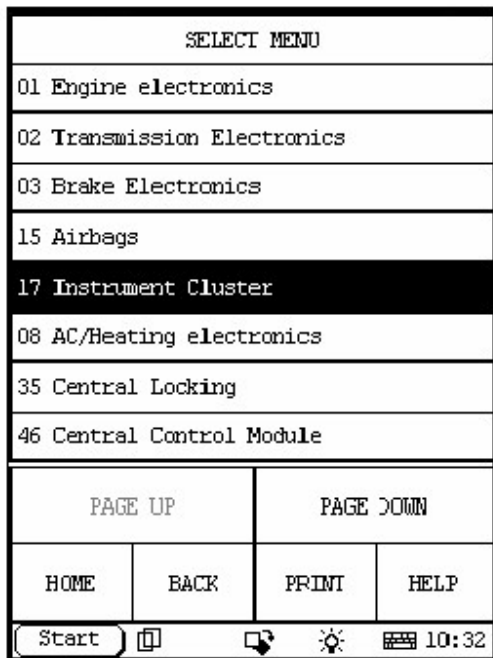
Enter '001' or '060' on some models

Using 001 Comp.st.C<down>sen.OK is displayed
 Using 060 compens OK 0.00 is displayed
 Please note that if '001' is used instead of the correct '060' on some models this is the procedure to bleed the brakes.

10 Fuel Level Indicator Adaptation

Adjusts the Instrument Cluster Fuel level
 Procedure

Enter
 (17 Instrument Cluster)



(Adaptation)

Adaptation					
Channel(0~255):					
30					
OK		CANCEL		BACK SPACE	
1	2	3	4	5	.
6	7	8	9	0	+/-
Start					10:44

In Channel enter '030'

use +/- to change value (Note: Fuel level gauge should change as you do this),press 'OK' to save

the new value

X431 will display [Adaptation success].

11 Air Bag Deactivate/Activate

Deactivate or Activate Airbags or Safety Belts

Procedure

Enter

(15 Airbags)

SELECT MENU			
01 Engine electronics			
02 Transmission Electronics			
03 Brake Electronics			
15 Airbags			
17 Instrument Cluster			
08 AC/Heating electronics			
35 Central Locking			
46 Central Control Module			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
(Start)			10:46

DIAGNOSE ITEM			
Control Unit Info			
Read Fault Codes			
Measuring Blocks (Live Data)			
Clear Fault Codes			
Basic Settings			
Adaptation			
Single Reading			
Output Tests			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
(Start)			10:40

(Adaptation)

Adaptation					
Channel(0~255):					
<input type="text" value="001"/>					
OK		CANCEL		BACK SPACE	
1	2	3	4	5	.
6	7	8	9	0	+/-
(Start)				10:41	

Adaptation					
GROUP:		1			
Adaptated number:		1			
PAGE UP		PAGE DOWN		PRINT	
<	OK	CANCEL	+	-	>
(Start)				10:23	

In Channel enter '01' For Passenger Airbag
 or '02' For Drivers Airbag
 or '03' For Passenger Side Airbag
 or '04' For Drivers Side Airbag
 or '05' For Passenger Belt
 or '06' For Drivers Belt
 Press (+) or (-) on X431 to change Adaptated Number

Change Adaptated Number to 1 to Block (Deactivate)
 Change Adaptated Number to 0 to Actived (Activate)
 Press (OK) to save the new value
 X431 will display [Adaptation success]
 To tell if a component is disabled(Deactivated) when Ignition is first turned on the Airbag warning light will come on for 3-4 seconds and will then blink for 15 seconds then go out. A fault will also be stored if you check fault codes ie [01281 Airbag driver's side switched off].

12 Instrument Cluster Language

Procedure

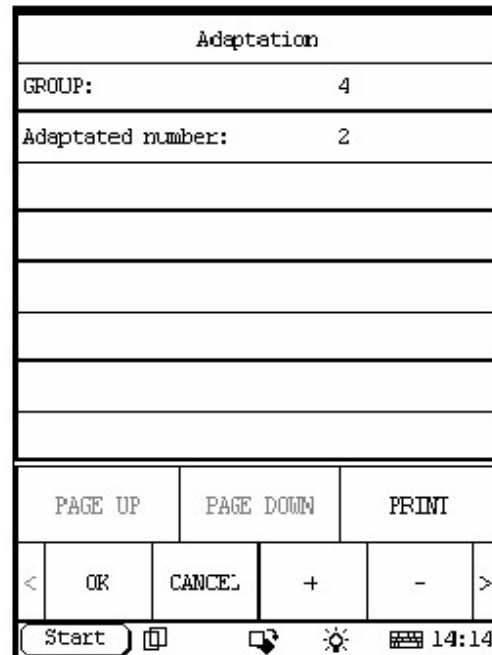
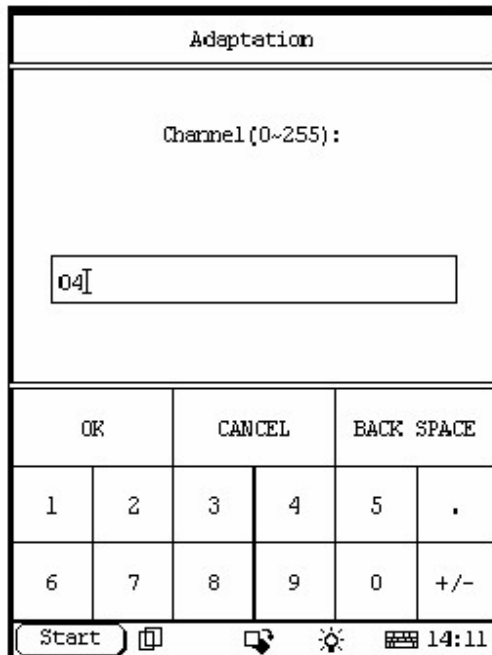
Enter

(17 Instrument Cluster)

SELECT MENU			
01 Engine electronics			
02 Transmission Electronics			
03 Brake Electronics			
15 Airbags			
17 Instrument Cluster			
08 AC/Heating electronics			
35 Central Locking			
46 Central Control Module			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
Start			10:32

DIAGNOSE ITEM			
Control Unit Info			
Read Fault Codes			
Measuring Blocks (Live Data)			
Clear Fault Codes			
Basic Settings			
Adaptation			
Single Reading			
Output Tests			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
Start			10:40

(Adaptation)



In Channel enter '04'

Using (+) or (-) Change value

- 1 German
- 2 English
- 3 French
- 4 Italian
- 5 Spanish
- 6 Portuguese

Press (OK) to save the new value
 X431 will display [Adaptation success].

13 AC/Heating Basic Settings

This relearns all the flap motors etc

Procedure

Enter

(08 AC/Heating electronics)

SELECT MENU			
01 Engine electronics			
02 Transmission Electronics			
03 Brake Electronics			
15 Airbags			
17 Instrument Cluster			
08 AC/Heating electronics			
35 Central Locking			
46 Central Control Module			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
Start			14:26

DIAGNOSE ITEM			
Control Unit Info			
Read Fault Codes			
Measuring Blocks (Live Data)			
Clear Fault Codes			
Basic Settings			
Adeptation			
Single Reading			
Output Tests			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
Start			09:08

(Basic Settings)

Basic Settings					
Channel(0~255):					
<input type="text" value="00"/>					
OK		CANCEL		BACK SPACE	
1	2	3	4	5	.
6	7	8	9	0	+/-
Start				14:27	

In Channel enter '00'
 Values will now change
 Wait until all values are [0.00]
 Press (BACK) and (BACK) again to Exit.

14 Coding New Airbag Control Modules

First off you need to refit the faulty Airbag Module connect X431 go to ECU. Info and note

down or print the ECU Coding ie 12855 and the ECU Part Number\nie 1CO 959 655. When

ordering new Airbag Modules from Main Dealer make sure you only supply. Car Details and

Chassis number for them to order from, sometimes when they order from the Airbag Module part

number they supply the wrong Airbag Module\nand you will not be able to Code this !Make sure

the new Airbag Module has the same part number also if you check the ECU Coding of the new

Airbag Module it should be 00000

Procedure

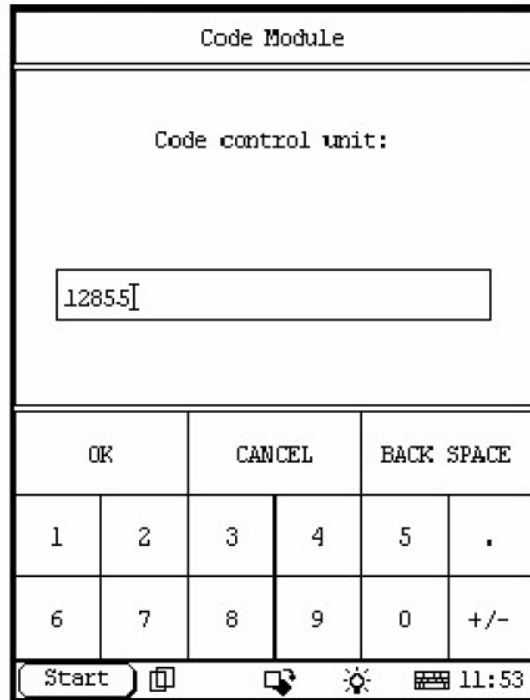
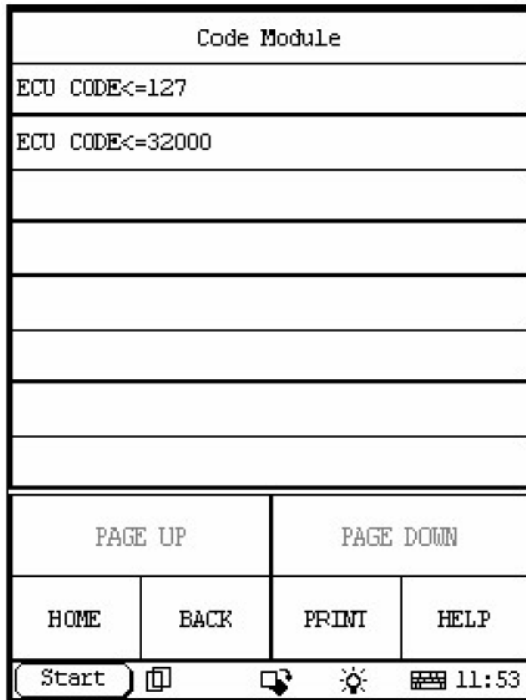
Enter (15 Airbags)

SELECT MENU			
01 Engine electronics			
02 Transmission Electronics			
03 Brake Electronics			
15 Airbags			
17 Instrument Cluster			
08 AC/Heating electronics			
35 Central Locking			
46 Central Control Module			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
(Start)			

Press (Page Down)

DIAGNOSE ITEM			
Code Module			
Login			
Chassis Number adjustment			
Readiness			
PAGE UP		PAGE DOWN	
HOME	BACK	PRINT	HELP
(Start)			

Select (Code Module)



Enter ECU Code ie '12855'

Press (ECU CODE<=32000)

Press (OK)\nX431 will Display [Can Code control unit].

Press (OK), ECU Coding should now display the new Code Entered. the Airbag Module CodingIf

is still 00000 then you have entered the wrong ECU Coding and will need to find the correct

Coding to enter. . Sometimes the new Airbag Module supplied has a different ECU part number

and this will have a different ECU Coding.