

21

PEUGEOT

CONTENTS

A
B
C
D
E

APPLICATIONS

GENERAL OPERATION

SPECIAL FUNCTIONS

TIPS & HINTS

REMOTE CONTROL PROGRAMMING

APPLICATIONS

A

VEHICLE	YEAR	SYSTEM	CABLE
106	1997 ON	IMMO 1	ADC110-B
206	1997 ON	BSI 1 BSI 2	ADC110-B
306	1997 ON	IMMO 1 CPH	ADC110-B
307	2001 ON 2005 ON	BSI 1,2 & 3 CAN	ADC110-B ADC148
406	97-99	IMMO1 CPH 1 CPH 2	ADC100 + ADC120
NEW 406	99 ON	BSI 1 BSI 2 BSI 3 BSI 4	ADC110-B
406 COUPE	97 ON	IMMO 1 CPH 1 CPH 2	ADC110-B
407	2005 ON	CAN	ADC148
607	2001 ON	BSI 1 BSI 2	ADC110-B
806	1997 ON	IMMO 1 IMMO 2 CPH	ADC110-B
807	2002 ON	BSI 1	
EXPERT	1997 ON	IMMO 1 IMMO 2 CPH	ADC110-B
PARTNER	1997 ON	IMMO 1 IMMO 2 CPH BSI 1 BSI 2	ADC110-B
RANCH	1997 ON	IMMO 1 IMMO 2	ADC110-B

INTRODUCTION

The Peugeot Immobiliser systems consist of 4 different types. They all perform various functions, and it is important to understand the basic configuration and the types of systems fitted.

IMM - STANDARD IMMOBILISER

This system was the first transponder system fitted to the Peugeot range of vehicles, after the keypad system was phased out. The system is a basic electronic control unit which consists of immobiliser unit, and transponder aerial to pick up the transponder signal code.

This system is similar to the GM immobiliser system, and is programmed and diagnosed in much the same way.

CPH - PASSENGER COMPARTMENT PROTECTION CONTROL UNIT

The next generation of Immobiliser and alarm system produced was the CPH system which controls a number of additional components which further enhances the vehicle protection system. These include central door locking, ultrasonic sensors to name a few.

This system is programmed in much the same way, but offers additional functionality on live data and actuators functions.

BSI - BODY SYSTEMS INTERFACE

On this system, the alarm and immobiliser have now been incorporated into the body control unit, which controls all body units, including wipers, indicators, lights, doors, windows, locks, boot, service interval, horn, etc.

Again, with BSI, the immobiliser is part of a complicated system there are many more functions included, on actuators, special functions and live data.

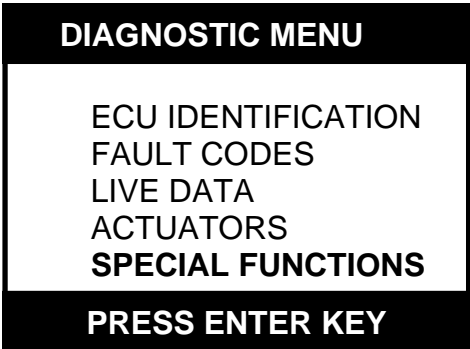
CAN - CONTROLLER AREA NETWORK

This is the latest system that still uses the BSI Interface as described above but in addition communicates via CAN rather than the traditional serial communications interface.

SPECIAL FUNCTIONS

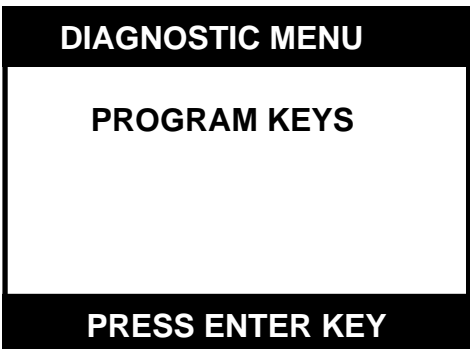


PROGRAMMING KEYS—IMMOBILISER 1 SYSTEM



Select **SPECIAL FUNCTIONS** from the Diagnostic Menu using the **UP** and **DOWN** arrows.

Then press the **ENTER** key.



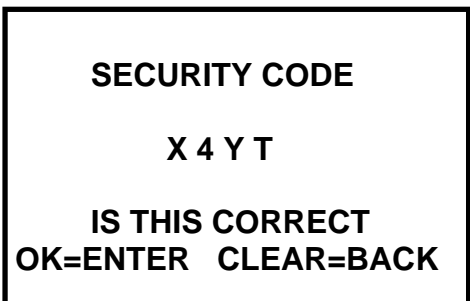
NOTE : ENSURE ALL DOORS ARE ALL CLOSED WHEN KEY PROGRAMMING IS BEING PERFORMED.

Using the **UP** and **DOWN** keys select the **PROGRAM KEYS** option



To enter the security code use the following procedure :-

Press **↑** **↓** To select Number & Letter



Press **←** To Erase the previous selection

Press **↵** To ENTER selection.

Press **↵** To Finish PIN selection.



If incorrect code is entered the screen will display as shown.

NOTE : If the code is entered 3 time incorrectly, then the ECU will lock access for 15 minutes.



SPECIAL FUNCTIONS

C

PROGRAMMING KEYS

TOTAL KEYS REQUIRED : 2

PRESS ENTER KEY

If Access code is correct, enter the number of keys to program.

NOTE : Max 4 keys can be added.

SWITCH IGNITION ON
IGNITION STATUS OFF

Follow on screen instruction for programming the keys.

SWITCH IGNITION OFF
IGNITION STATUS ON

After switching IGNTION OFF remove the key and repeat procedure for additional keys.

PROGRAMMING KEYS—BSi MODULE

DIAGNOSTIC MENU

ECU IDENTIFICATION
FAULT CODES
LIVE DATA
ACTUATORS
SPECIAL FUNCTIONS

PRESS ENTER KEY

Select **SPECIAL FUNCTIONS** from the Diagnostic Menu using the **UP** and **DOWN** arrows.

Then press the **ENTER** key.

NOTE : ENSURE ALL DOORS ARE CLOSED WHEN KEY PROGRAMMING IS BEING PERFORMED.

DIAGNOSTIC MENU

PROGRAM KEYS

PRESS ENTER KEY

Using the **UP** and **DOWN** keys select the **PROGRAM KEYS** option

SPECIAL FUNCTIONS



SECURITY CODE
- - - -

To enter the security code use the following procedure :-

Press **↑** **↓** to select Number & Letter

SECURITY CODE
X 4 Y T

IS THIS CORRECT
OK=ENTER CLEAR=BACK

Press **←** To Erase the previous selection

Press **↵** To ENTER selection.

Press **↵** To Finish PIN selection.

NOTE : AFTER PROGRAMMING CLEAR FAULT CODES AND LOCK VEHICLE FOR 10 MINUTES BEFORE TRYING THE KEY OR PLIP.

WARNING : WHEN PROGRAMMING KEYS, THE SYSTEM AUTOMATICALLY ERASES THE PLIP KEYS AT THE SAME TIME. BEFORE PROCEEDING WITH KEY PROGRAMMING, ENSURE YOU HAVE THE PLIP KEY PROGRAMMING PROCEDURE.

TRYING TO COMMUNICATE

If Access code is correct, enter the number of keys to program.

PRESS ENTER KEY

NOTE : Max 4 keys can be added.

SWITCH IGNITION OFF
IGNITION STATUS ON

Follow on screen instruction for programming the keys.

PRESS ENTER KEY

ERASING KEYS
PROGRAMMING KEYS



SPECIAL FUNCTIONS

C

SWITCH IGNITION ON

SWITCH IGNITION OFF

REMOVE KEY FROM
IGNITION

INSERT NEXT KEY

SWITCH IGNITION ON
IGNITION STATUS OFF

NOTE : AFTER PROGRAMMING CLEAR
FAULT CODES AND LOCK VEHICLE
FOR 10 MINUTES BEFORE TRYING THE
KEY OR PLIP.

TRYING TO COMMUNICATE

PRESS ENTER KEY

PRESS BACK TO EXIT

PRESS ENTER TO
PROGRAM NEXT KEY

PRESS ENTER KEY

**NOTE : AFTER PROGRAMMING KEYS, THE REMOTE CONTROL
RE-SYNCHRONISATION WILL BE REQUIRED WITHIN 30 SEC-
ONDS OF PROGRAMMING KEYS, OR KEY PROGRAMMING WILL
BE REQUIRED AGAIN.**

SPECIAL FUNCTIONS

C

PROGRAMMING KEYS - CAN SYSTEM

VEHICLE SELECTION

MITSUBISHI
NISSAN
> PEUGEOT
PROTON
RENAULT
ROVER

PRESS ENTER KEY

VEHICLE SELECTION

807
BOXER
PARTNER
EXPERT
RANCH
> PSA CAN

PRESS ENTER KEY

SWITCH IGNITION ON

PRESS ENTER KEY

ECU IDENTIFICATION

PSA REF: 8096428252

PRESS ENTER KEY

DIAGNOSTIC MENU

ECU IDENTIFICATION
FAULT CODES
LIVE DATA
ACTUATORS
SPECIAL FUNCTIONS

PRESS ENTER KEY

The CAN system can either be selected by selecting the vehicle model or selecting PSA CAN system.

Main Menu

Select **SPECIAL FUNCTIONS**

SPECIAL FUNCTIONS

C

PROGRAMMING KEYS - CAN SYSTEM

DIAGNOSTIC MENU

> DISPLAY FAULT CODES
CLEAR FAULT CODES

PRESS ENTER KEY

FAULT CODES

To read and clear fault codes, select the required function and follow on screen instructions

LIVE DATA

LOCK STATE	INITIAL
LOCK REASON	UNIDF
LH LOCK	YES
RH LOCK	YES
LOCKING	INACTIVE
UNLOCKING	INACTIVE

LIVE DATA

Select **LIVE DATA** to display useful information about the state of the vehicle.

To see more items, use the UP and DOWN buttons.

ACTUATORS

LOCKING OF LOCKS
UNLOCKING OF LOCKS
DEADLOCKS
BOOT OPEN
REAR SCREEN UNLOCK
ESP LED

ACTUATORS

Select **ACTUATORS** to operate specific components on the vehicle.

DIAGNOSTIC MENU

ECU IDENTIFICATION
FAULT CODES
LIVE DATA
ACTUATORS
> **SPECIAL FUNCTIONS**

PRESS ENTER KEY

SPECIAL FUNCTIONS

To Program new keys and remotes select **SPECIAL FUNCTIONS**.

DIAGNOSTIC MENU

> **PROGRAMMING KEYS**

Select **PROGRAMMING KEYS**

SPECIAL FUNCTIONS

C

PROGRAMMING KEYS - CAN SYSTEM

SECURITY

PLEASE SELECT CODE
ENTRY METHOD

1. UP DOWN ARROWS
2. PHONE STYLE KEYPAD

Select the method of how you wish to enter data when you are asked to enter the security code.

SECURITY CODE

Enter security code.

SECURITY CODE

LXMA

IS THIS CORRECT
OK=ENTER CLEAR=BACK

Confirm security code is correct.

INCORRECT ACCESS CODE

PRESS ENTER KEY

If incorrect code is entered the screen will display as shown.

SWITCH IGNITION OFF

PRESS ENTER KEY

INSERT KEY TO PROGRAM
IGN ON WITHIN 15 SEC

Insert the ignition key into the ignition and turn the ignition on within 15 sec.

BACK' TO EXIT
ENTER' TO PROGRAM
NEXT KEY

If you have no more keys to program press BACK.
If you want to program more keys press ENTER

21



SPECIAL FUNCTIONS

C

PROGRAMMING KEYS - CAN SYSTEM

REMOVE KEY FROM IGN.
THEN INSERT NEXT KEY

PRESS ENTER KEY

Insert next key to be programmed.

BACK' TO EXIT
ENTER' TO PROGRAM
NEXT KEY

Press back to EXIT when all keys programmed.

PROCEDURE COMPLETE
PRESS AND HOLD LOCK
BUTTON FOR 5 SECOND
WITH KEY IN IGNITION
TO SYNC REMOTE

PRESS ENTER KEY

Key Programming procedure is now complete.

Remote Programming

Remotes are programmed manually by inserting the key into the ignition, turning on and holding the 'Lock' button for 5 seconds.

Repeat this for each remote that requires Programming.

Note: The remotes need to be left for 30 seconds after programming before they will operate.

TIPS & HINTS

D

TRANSPONDER KEYS

If using non original transponders or keys on BSI systems, it is possible for the following problems :-

1. No communication
2. Incorrect PIN CODE

CABLE CONNECTION

On the Citroen Xantia / Peugeot 406 early OBD connection is very loose, and the ADC120 cable needs to be held and pushed into the vehicle OBD connector to make sure a good connection is made.

SYSTEM IDENTIFICATION FOR 406 OLD & 406 NEW



406 OLD CONNECTOR/SYSTEM

USE ADC120 + ADC100

NOTE : PULL DOWN PANEL TO RIGHT OF STEERING WHEEL.



406 NEW CONNECTOR/SYSTEM

USE ADC110-B

NOTE : PULL OUT PANEL NEXT TO HEADLIGHT LEVEL ADJUSTMENT SWITCH

BSI INFORMATION

Introduction

Currently there is a different BSA for each model that Peugeot produces. although the boxes are different, in general they use the same connectors and a large number of the connector pins have the same function.

The BSI is a computer much like the PCs we have at home. Like a PC, when working on any vehicle fitted with a BSI there are certain procedures that must be followed to avoid corruption of the software and loss of pre-programmed settings or memories.

Failure to adhere to the correct procedures can result in a non-start, a loss of configuration or a burnt out BSI. All of which are time consuming to rectify.

BSI activation

The BSI can be woken up by activating certain functions i.e key plip, opening a door or switching on the radio. When woken, it switches to full operating mode instantly.

On switching the ignition off it continues working for up to 2 minutes and then shuts itself down progressively taking a further 1 minute to do so. At this point its power consumption is approximately 0.02 of an Amp and is referred to as being asleep or in 'Standby'/'Power Save' mode. If however the driver switched on a consumer with the engine not running, the BSI stays awake for thirty minutes (Economy Mode).

Anything which interrupts the BSI's shut down operation can cause the problems mentioned in the above introduction. This is the reason for the 3-minute rule.

Procedure for Battery Disconnection (The 3 minute rule)

1. Whenever a vehicle battery has to be disconnected, switch off all equipment interior lights etc. close the doors leaving the driver's window down.
2. Switch off the ignition and remove the key and DIAG if connected.
3. **Wait a full 3-minutes** before disconnecting the battery.

The BSI must be allowed to go to sleep i.e into 'Power Save' mode. Do not operate any equipment on the vehicle during this time. Remember, even opening the bonnet will wake up the BSI on the vehicle fitted with an alarm.

If the battery is under the bonnet open the bonnet first and leave it up. 807 batteries can be disconnected through the driver's window, remove floor cover first.

Always disconnect the DIAG, as the BSI does not go to sleep when connected. Ensure that a plip from the same Peugeot model type is not operated within range of your vehicle as this will also wake up the BSI.

Procedure for Battery Reconnection

Unless instructed otherwise by Peugeot or Product Service, you must always carry out the following procedure, often referred to as a 'Soft Re-boot', to minimise the possibility of the BSI corrupting its own software when reconnecting the vehicle's battery supply.

Ensure that the procedure for battery disconnection has been adhered to and importantly all BSI functions were switched off with the driver's window left down.

1. Close all doors on the vehicle.
2. Remove the ignition key if left in the ignition.
3. Reconnect the battery.
4. Wait 10 seconds.
5. Switch on the headlights through the driver's window. You will hear a 'Bong'.
6. Switch on the ignition then start the vehicle and check systems are functioning.

Upon reconnection of the battery: If any vehicle function controlled by the BSI i.e. interior light is switched on, the internal operation of the BSI has the potential to spike or corrupt its configuration and software program.

BSI INFORMATION

Procedure for Jump Starting a Vehicle fitted with BSI

Certain precautions must be observed when jump starting vehicles fitted with a BSI. Failure to do so can result in spiking ECUs including the BSI and engine management. Remember, when connecting the leads always fit the earth lead clamp last when completing the jump circuit and disconnect it first on removal.

1. Having connected the jump leads, start the donor vehicle, then start the vehicle with the flat battery.
2. Wait a few minutes for its tick-over to stabilise. **Do not rev the engine.**
3. Switch on its headlights, heated rear window and heater fan.
4. Remove the jump leads from the vehicles.
5. Switch off all loads one by one.
6. Allow vehicle to idle and recharge battery.
- 7.

This procedure prevents the alternator, suddenly loaded by the removal of the jump leads, from creating a high voltage spike before the alternator's regulator can stabilise the voltage

Procedure for BSI Disconnection & Reconnection

1. If the BSI is being removed, print off or note down the BSI configuration first.
2. Follow the 'Battery Disconnection' procedure (remembering the 3 minute rule).
3. Remove the BSI.
4. After all repairs are complete, refit the BSI.
5. Follow the 'Battery Reconnection' procedure.
- 6.

The battery is disconnected to prevent accidental spiking of the BSI on removing the connectors.

Procedure for BSI Replacement

1. Carry out the 'BSI removal' procedure, points 1,2 & 3, important, **remember** the 3-minute rule.
2. For the replacement BSI.
3. Reconnect the battery, open the door and switch on the ignition.
4. Connect DIAG and download the latest BSI software version, via the 'Replacement Parts' menu, (except 406 BSI, which should be supplied programmed with the latest version).
5. Complete a Configuration/Initialisation of the BSI, following the 'Procedure for Initialising the BSI after a Download' on the next page.
- 6.

Please not the following:

Replacement BSIs can be supplied with very early software versions.

You must download the latest software version before starting the initialisation and configuration of the replacement BSI, with the exception of 406 which cannot be downloaded.

You must also adhere to the 3-minute rule. Failure to do so may result in the new BSI being unable to communicate with the original engine management ECU and the vehicle not starting. Remember you only have three attempts to initialise the engine management ECU to the BSI.

Finally always check the battery is fully charged otherwise initialisation and configuration may fail.

106 PLIP PROGRAMMING

Procedure

1. Unlock the vehicle using the working key.
2. Press the LOCK button 2 times within 20 seconds.

206 PLIP PROGRAMMING

CENTRAL DOOR LOCK (1 BUTTON PLIP KEY)

Procedure

1. Ensure all doors are unlocked using the key.
2. Press and hold plip key button until LED stops flashing.
3. After releasing button, LED will light constantly.
4. Press the Plip Button once, and LED will extinguish.
5. Open the door and hold the Plip key near the Ignition switch, and press the plip button one time.
6. Turn the ignition ON, and wait 10 seconds then turn ignition OFF.
7. After 5 seconds, Plip should now operate.

CENTRAL DOOR LOCK with DEADLOCKING (2 BUTTON PLIP KEY)

Procedure

1. Ensure all doors are unlocked using the key.
2. Press and HOLD the large plip key button while the LED flashes continuously for 20 seconds. After 20 seconds press the small deadlock button once while still holding the large button.
3. The LED will stop flashing.
4. Release the large button and the LED will light constantly.
5. Press the large button one time, and the LED will go out.
6. Open the door and hold the Plip key near the Ignition switch, and press the large plip button one time.
7. Turn the ignition ON, and wait 10 seconds then turn ignition OFF.
8. After 5 seconds, Plip should now operate.

206 PLIP PROGRAMMING SYNCHRONISATION—BSI

Ensure TESTER is disconnected

Procedure

1. Insert Ignition Key.
2. Press the small Black button.
3. Switch the Ignition ON
4. Keep the lock button pressed for 10 seconds.
5. Release lock button, switch ignition OFF and remove key.
6. Close all doors and press the lock button 2 times.

NOTE : If PLIPS still do not work, start the vehicle and then turn OFF. Open and close the door, and check PLIP again. This is also necessary after a new BSI system is fitted.

REMOTE CONTROL PROGRAMMING



306 & 806(From 98MY) PLIP PROGRAMMING

Procedure

1. Turn the Ignition switch to accessory position using the key, without the remote plip attached.
2. Hold the Plip key close to the central locking receiver mounted in the roof console.
3. Press the large plip button, then the small plip button on the remote.
4. Repeat for second Plip key if required.
5. Turn ignition OFF.
6. After 5 seconds, Plip should now operate.

406 & 605 PLIP PROGRAMMING

The 406 deadlocking remote control has specific button controls, and if the vehicles has two controls, one is set as primary and the other as secondary. When replacing the Plip, a Primary or Secondary Plip are different part numbers and must be ordered as required. The white label inside the Plip is labelled PRIM and SEC.

Procedure

1. Turn the Ignition switch ON.
2. Press the large Plip key button (Primary Plip)
3. Within 10 seconds, press the large Plip key button (Secondary Plip)
4. If there is one remote, press the Primary plip button twice.
5. Turn ignition OFF.
6. Test Plip's for correct operation.

NOTE : On some 406 models, Plips cannot be re-synchronised unless the battery has been disconnected for 1 minute.

406 (D9) PLIP PROGRAMMING (2001 >)

Procedure

1. Press and hold large button and then press and hold the small button for 20 seconds.
1. Release both buttons, the indicator light on the plip will illuminate.
2. Press the large button once and the light will go out.
3. Switch the ignition 'ON' for 3 to 5 seconds.
4. Switch the ignition 'OFF' and remove the key.
5. Lock and Unlock the vehicle with the remote to test.

806 (Up to 98MY) PLIP PROGRAMMING

Procedure

1. Turn the Ignition switch to accessory position using the key, without the remote plip attached.
2. Hold the Plip key towards the receiver at the front of the vehicle.
3. Press the large plip button, then the small plip button on the remote.
4. Repeat for second Plip key if required.
5. Turn ignition OFF.
6. After 5 seconds, Plip should now operate.

REMOTE CONTROL PROGRAMMING

307 PLIP PROGRAMMING

Procedure

1. Turn the Ignition switch to ON position using the first key.
2. Press the LOCK button for 10 seconds.
3. Remove key and wait for 10 seconds.
4. Check Plip key operation.
5. Repeat for second Plip key if required.
6. Turn ignition OFF

307 & 407 CAN PLIP PROGRAMMING

Procedure

1. Turn the Ignition switch to ON position using the first key.
2. Press the LOCK button for 5 seconds.
3. Remove key and wait for 30 seconds.
4. Check Plip key operation.
5. Repeat for second Plip key if required.
6. Turn ignition OFF