PEUGEOT

UNLOCKING TECHNOLOGY

PEUGEOT

ADVANCED DIAGNOSTICS

PEUGEOT - CONTENTS

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PEUGEOT (ADS105)

				1234	1234	PRO		AD100
106	1997 ⇨	✓	×	✓	@	ADC151	A	ADC110-B
1007	ALL	✓	✓	✓	@	ADC151	A	ADC110-B
206 (VF32)	1997 ⇨	✓	✓	✓	@	ADC151	A	ADC110-B
306	1997 ⇨	✓	✓	✓	@	ADC151	A	ADC110-B
306 CPH	1997 ⇨	✓	✓	✓	@	ADC151	A	ADC110-B
307 BSI	1997 ⇨	✓	✓	✓	@	ADC151	A	ADC110-B
406	1997 ⇨	✓	×	✓	@	ADC151	A or D (2000 MY)	ADC110-B
406 COUPE	1997 ⇨	✓	×	✓	@	ADC151	A	ADC110-B
406 (NEW)	1997 ⇨	✓	×	✓	@	ADC151	A	ADC110-B
406 CPH	1997 ⇨	✓	✓	✓	@	ADC151	A	ADC110-B
607 BSI	1997 ⇨	✓	✓	✓	@	ADC151	A	ADC110-B
806	1997 ⇨	✓	✓	✓	@	ADC151	A	ADC110-B
806 CPH	1997 ⇨	✓	✓	✓	@	ADC151	A	ADC110-B
807	2002 ⇨	✓	✓	✓	@	ADC151	A	ADC110-B
PARTNER	1997 ⇨2007	✓	×	✓	@	ADC151	A	ADC110-B
EXPERT	1997 ⇨	✓	×	✓	@	ADC151	A	ADC110-B
RANCH	1997 ⇨	✓	×	✓	@	ADC151	A	ADC110-B
BOXER II	⇨2008	✓	✓	✓	@	ADC151	A	ADC110-B
BOXER III	2009 ⇨	✓	✓	✓	@	ADC151	A	ADC110-B

PEUGEOT CAN (ADS142)

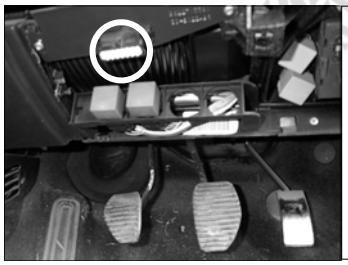
** REQUIRES FIAT 2008 SOFTWARE

				1234	1234	PRO		AD100
1007 CAN BUS	ALL	CAN	✓	✓	@	ADC151	H	ADC148
207 CAN BUS	2006 ⇨	CAN	✓	✓	@	ADC151	H	ADC148
307 CAN BUS	2005 ⇨	CAN	✓	✓	@	ADC151	H	ADC148
308 CAN BUS	ALL	CAN	✓	✓	@	ADC151	H	ADC148
3008 CAN BUS	ALL	CAN	✓	✓	@	ADC151	H	ADC148
407 CAN BUS	ALL	CAN	✓	✓	@	ADC151	H	ADC148
4007 CAN BUS	ALL	CAN	✓	✓	@	ADC151	H	ADC148
5008 CAN BUS	ALL	CAN	✓	✓	@	ADC151	H	ADC148
607 CAN BUS	ALL	CAN	✓	✓	@	ADC151	H	ADC148
807 CAN BUS	2006 ⇨	CAN	✓	✓	@	ADC151	H	ADC148
BIPPER**	2008 ⇨	CAN	✓	✓	@	ADC151	J	×
EXPERT	2008 ⇨	CAN	✓	✓	@	ADC151	H	ADC148
PARTNER	2008 ⇨	CAN	✓	✓	@	ADC151	H	ADC148
RCZ	2010 ⇨	CAN	✓	✓	@	ADC151	H	×

PEUGEOT

106

206



306

807 (NON CAN)

406

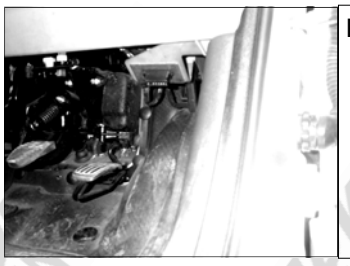
406

607

EXPERT

307

407



PARTNER

NEW 307 (CAN)

PEUGEOT

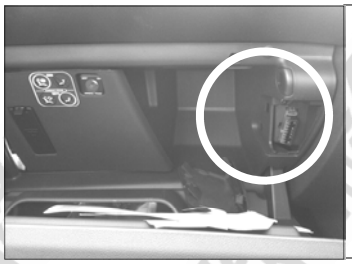
1007

4007

BIPPER

807 (CAN BUS)

107



5008

207

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.

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

PEUGEOT - ALL IMMO & CPH SYSTEMS

PROGRAM KEYS

VEHICLE SELECTION

+ LANCIA
+ MITSUBISHI
+ NISSAN
+ PEUGEOT
+ ROVER
+ SUZUKI

VEHICLE SELECTION

+ 106
+ 206
+ 207
+ 306
+ 307
+ 406

VEHICLE SELECTION

IMMOBL.1

SWITCH IGNITION ON

PRESS ENTER KEY

ECU IDENTIFICATION

ECU NO : 964512341234

PRESS ENTER KEY

DIAGNOSTIC MENU

ECU IDENTIFICATION
FAULT CODES
LIVE DATA
SPECIAL FUNCTIONS

PRESS ENTER KEY

PROGRAM KEYS

DIAGNOSTIC MENU

KEYS PROGRAMMED
PROGRAM KEYS
READ MEMORY

PRESS ENTER KEY

SWITCH IGNITION OFF

IGNITION STATUS ON

NOTE : FOLLOW SCREEN INSTRUCTIONS CAREFULLY.

SECURITY CODE

_ _ _ _

1	2	3	4	5
6	7	8	9	0

22BC

✘ ✓

TOTAL KEYS REQD :

1	2	3	4	5
6	7	8	9	0

PROGRAM KEYS

PROGRAMMING KEYS

TOTAL KEYS REQD : 2

PRESS ENTER KEY

SWITCH IGNITION ON

IGNITION STATUS OFF

IMPORTANT NOTE :

PLEASE MAKE SURE YOU REMOVE THE KEY FULLY FROM THE IGNITION,WHEN PROGRAMMING MORE THAN 1 KEY.

REMOVE KEY FROM IGN.

THEN INSERT NEXT KEY

PRESS ENTER KEY

SWITCH IGNITION ON

IGNITION STATUS ON

PROGRAMMING KEYS

KEYS PROGRAMMED : 2

TOTAL KEYS REQD : 2

PEUGEOT - ALL BSI SYSTEMS

PROGRAM KEYS

VEHICLE SELECTION

+ LANCIA
+ MITSUBISHI
+ NISSAN
+ PEUGEOT
+ ROVER
+ SUZUKI

VEHICLE SELECTION

+ 106
+ 206
+ 207
+ 306
+ 307
+ 406

VEHICLE SELECTION

BSI 1
BSI 2

NOTE : TRY BSI 1 FIRST THEN TRY BSI 2, THEN BSI 3 IF THOSE OPTIONS EXIST.

SWITCH IGNITION ON

PRESS ENTER KEY

ECU IDENTIFICATION

ECU NO : 964512341234

VF7CHRSD12345678

PRESS ENTER KEY

PROGRAM KEYS

DIAGNOSTIC MENU

ECU IDENTIFICATION
FAULT CODES
LIVE DATA
ACTUATORS
SPECIAL FUNCTIONS

PRESS ENTER KEY

DIAGNOSTIC MENU

PROGRAM KEYS
RES. SERV. MILEAGE
READ MEMORY

PRESS ENTER KEY

SECURITY CODE

_ _ _ _

1	2	3	4	5
6	7	8	9	0

NOTE : TO INSERT LETTERS AND OTHER CHARACTERS, USE THE LEFT AND RIGHT BUTTONS TO SCROLL THROUGH THE DIFFERENT KEYPAD OPTIONS.

SECURITY CODE

22BC

✘ ✓

SWITCH IGNITION OFF
AND THEN PRESS ENTER

PROGRAM KEYS

SWITCH IGNITION ON
AND THEN PRESS ENTER

BACK' TO EXIT.
ENTER' TO PROGRAM
NEXT KEY

REMOVE KEY FROM IGN

THEN INSERT NEXT KEY

PRESS ENTER KEY

SWITCH IGNITION OFF
AND THEN PRESS ENTER

SWITCH IGNITION ON
AND THEN PRESS ENTER

BACK' TO EXIT.
ENTER' TO PROGRAM
NEXT KEY

PEUGEOT - ALL CAN SYSTEMS

PROGRAM KEYS

DIAGNOSTIC MENU

PROGRAM KEYS

RES. SERV. MILEAGE

READ MEMORY

PRESS ENTER KEY

NOTE : REPEAT FOR UP TO 4 KEYS, AND PRESS THE BACK BUTTON TO EXIT PROGRAMMING MODE.

NOTE 2 : TEST ALL KEYS FOR OPERATION, ENSURING YOU WAIT 1 MINUTE BETWEEN TESTING KEYS TO ENSURE THEY DO WORK.

FINISHED

PROGRAM KEYS

VEHICLE SELECTION

+ LANCIA

+ MITSUBISHI

+ NISSAN

+ PEUGEOT

+ ROVER

+ SUZUKI

VEHICLE SELECTION

+ 106

+ 206

+ 207

+ 306

+ 307

+ 406

SWITCH IGNITION ON

PRESS ENTER KEY

ECU IDENTIFICATION

PSA REF : 964512341234

PRESS ENTER KEY

DIAGNOSTIC MENU

ECU IDENTIFICATION

FAULT CODES

LIVE DATA

ACTUATORS

SPECIAL FUNCTIONS

PRESS ENTER KEY

DIAGNOSTIC MENU

KEY PROGRAMMING

PRESS ENTER KEY

PROGRAM KEYS

SECURITY CODE

_ _ _ _

1	2	3	4	5
6	7	8	9	0

NOTE : TO INSERT LETTERS AND OTHER CHARACTERS, USE THE LEFT AND RIGHT BUTTONS TO SCROLL THROUGH THE DIFFERENT KEYPAD OPTIONS.

SECURITY CODE

22BC

✘ ✓

SWITCH IGNITION OFF

PRESS ENTER KEY

INSERT KEY TO PROGRAM

IGN ON WITHIN 15 SEC

BACK' TO EXIT.

ENTER' TO PROGRAM

NEXT KEY

PEUGEOT - ALL CAN SYSTEMS

PROGRAM KEYS

REMOVE KEY FROM IGN

THEN INSERT NEXT KEY

PRESS ENTER KEY

IGN ON WITHIN 15 SEC

BACK' TO EXIT.

ENTER' TO PROGRAM

NEXT KEY

NOTE : ALL KEYS, EXISTING AND NEW KEYS MUST BE PROGRAMMED AT THIS TIME.

ANY KEYS NOT PROGRAMMED WILL NOT WORK.

PROCEDURE COMPLETE

PRESS AND HOLD LOCK

BUTTON FOR 5 SECONDS

WITH KEY IN IGNITION TO SY

NC REMOTE.

PRESS ENTER KEY

NOTE : REPEAT THIS FOR ALL REMOTE CONTROL KEYS.

THEN LOCK VEHICLE AND TEST ALL REMOTE CONTROLS FOR OPERATION.

BSI INFORMATION

Procedures and precautions for battery disconnection and reconnection on BSI.

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 shits 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)

Whenever a vehicle battery has to be disconnected, switch off all equipment interior lights etc. close the doors leaving the driver's window down.

Switch off the ignition and remove the key and DIAG if connected.

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.

Close all doors on the vehicle.
Remove the ignition key if left in the ignition.
Reconnect the battery.
Wait 10 seconds.
Switch on the headlights through the driver's window. You will hear a 'Bong'.
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.

As a consequence this procedure for reconnecting the battery on a BSI vehicle should be adopted as common practice.

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.

Having connected the jump leads, start the donor vehicle, then start the vehicle with the flat battery.

Wait a few minutes for its tick-over to stabilise. Do not rev the engine.

Switch on its headlights, heated rear window and heater fan.

Remove the jump leads from the vehicles.

Switch off all loads one by one.

Allow vehicle to idle and recharge battery.

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.

Procedures and Precautions for BSI Disconnection, Reconnection or Replacement

Procedure for BSI Disconnection & Reconnection

If the BSI is being removed, print off or note down the BSI configuration first.

Follow the 'Battery Disconnection' procedure (remembering the 3 minute rule).

Remove the BSI.

After all repairs are complete, refit the BSI.

Follow the 'Battery Reconnection' procedure.

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

Procedure for BSI Replacement

Carry out the 'BSI removal' procedure, points 1,2 & 3, important, remember the 3-minute rule.

Fir the replacement BSI.

Reconnect the battery, open the door and switch on the ignition.

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).

Complete a Configuration/Initialisation of the BSI, following the 'Procedure for Initialising the BSI after a Download' on the next page.

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.

BSI INFORMATION

Precautions when Downloading and Initialising the BSI

Checks to be made prior to downloading a BSI

The vehicle battery must always be fully charged before downloading. A fully charged battery should have a voltage of between 12.6 & 12.8 volts.

Never have a battery charger on the vehicle during downloading or initialisation.
Always have the DIAG operating from a mains supply.
Always copy or print off the BSI configuration before starting a download.

Procedure for Initialising the BSI after downloading

Lower the drivers door window and connect DIAG.
Download the latest BSI software version into the unit.
Initialise, configure and program all the keys into the BSI, via 'Replacement Parts' menu.
Disconnect DIAG.
With the driver's door window still down, ensure all equipment is switched off.
Ensure all the doors are closed and remove the key from the ignition.
Remembering the 3 minute rule, disconnect the vehicle battery and wait 15 seconds.
Reconnect the vehicle battery, wait a further 10 seconds. Do not open any doors.
Switch on the headlamps through the driver's window. You will hear a 'Bong'.
Switch on the ignition and check systems functionality.
Start the engine and complete the systems functionality check.
This procedure is designed to put the BSI to sleep and then wake it up in the cleanest possible way (Soft Re-Boot) ensuring that the newly downloaded software is not corrupted.

Failure to follow this procedure could result in incorrect operation of, Fuel Gauge. Oil Level Indicator, Key Learning and many other BSI controlled functions.

Remarks and Special Points

607 Vehicles
607 vehicles can have two batteries. The second battery is located in the boot under the R/H/S boot trim. This battery powers all the vehicles systems. The front battery is for starting only. a single red 50 amp maxi fuse, located to the left of the engine management ECU, connects the second battery to the vehicle. This fuse must be removed as well as the front battery connection to disconnect battery power on these vehicles. There is also a maxi fuse at the battery end under the boot trim. This is not accessible without removing the trim but the connections to the fuse holder should be checked if power is lost to the front of the vehicle.

Earths
Before removing the main earth strap mounting for the battery, either for replacement, checking or cleaning, always disconnect at the battery end first or keep earth continuity with a fly lead until the bolt is removed. This avoids the earth making and breaking whilst removing the bolt and switching the BSI power supply on and off.

To clear built-up battery charge in the vehicle systems after battery disconnection, short the earth and positive battery leads together for a few seconds. NB This is done without any Battery or External Power Source connected to the vehicle.

106

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

206

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 but ton 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 - 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.

306 - 806

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

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) 2001 >

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

806 > 1998

806 (Up to 98MY) PLIP PROGRAMMING

Procedure
1. Turn Ign 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.

307

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 (CAN) & 407 (CAN)

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

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ADVANCED DIAGNOSTICS