Espace

N.T. 3028A

JE0X

Special notes for vehicles equipped with the passenger compartment connection unit, known as (BII), the intelligent connection unit.

Vehicle identification :
the red immobiliser warning light is on the instrument panel.

For the sections not described in this note, refer to M.R. 315.

77 11 200 466 **JUNE 1998** **Edition Anglaise**

Contents

GENERAL

This technical development allows the vehicle wiring to be made simpler by the use of multiplexing.

This new feature for model year 1999 brings several improvements in terms of customer use, but will require no new knowledge in the area of fault finding and repair.

The special features are dealt with in this section and the wiring diagram NT8141A.

DEVELOPMENTS

- Instrument panel display.
- Radiofrequency PLIP for doors.
- Interior lighting programming.
- Wiper programming.
- Electric windows.
- Location of fuses.

INSTRUMENT PANEL
The red immobiliser warning light is on the left hand side.
Regrouping of handbrake and brake fluid level warning lights.
Display of outside temperature on all vehicles with radio equipment.
Generates the radiofrequency code (TRF) and sends the command for door locking or unlocking to the passenger compartment connection unit.

PLIP
Due to the increase in effective range of the radiofrequency plip response time may vary. Maintain the pressure on the plip until the door locks have been activated. Effective operational range approximately 2 metres.

INTERIOR LIGHTING PROGRAMMING
The middle row of lights operate in the same way as the front ones.

WIPING
Pulsed wiping.
Rear wiping operation when reverse gear is selected.
Operation of windscreen wipers vary with vehicle speed.

ELECTRIC WINDOWS
Operation authorised when the ignition switch is at + accessories feed or stop for 30 seconds.

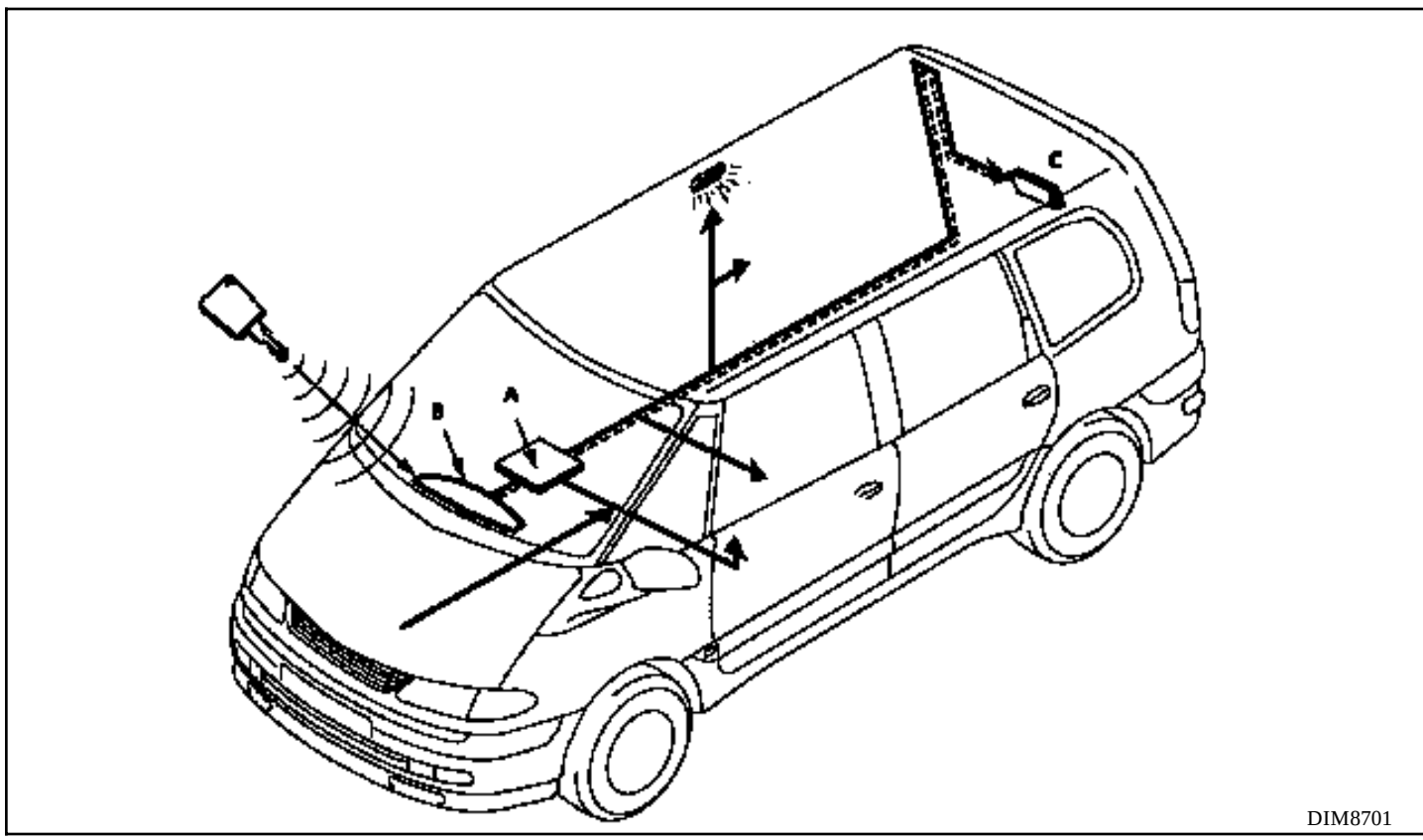
TECHNICAL DEVELOPMENTS

New components:
- Passenger compartment structure wiring.
- Dashboard wiring.
- Fuse box and
  Passenger Compartment Connection Unit (BII).
- Tailgate module.
- Instrument panel display.
- Radio control of the opening elements.

OPERATING PRINCIPLE

The passenger compartment connection unit (BII):
- receives driver's commands and engine alerts
- sends digital codes to the instrument panel and to the tailgate module, via two wires for the instrument panel and via one wire for the tailgate module which carries several commands at one time.

LOCATION OF COMPONENTS CONNECTED TO THE PASSENGER COMPARTMENT CONNECTION UNIT BII



DIM8701

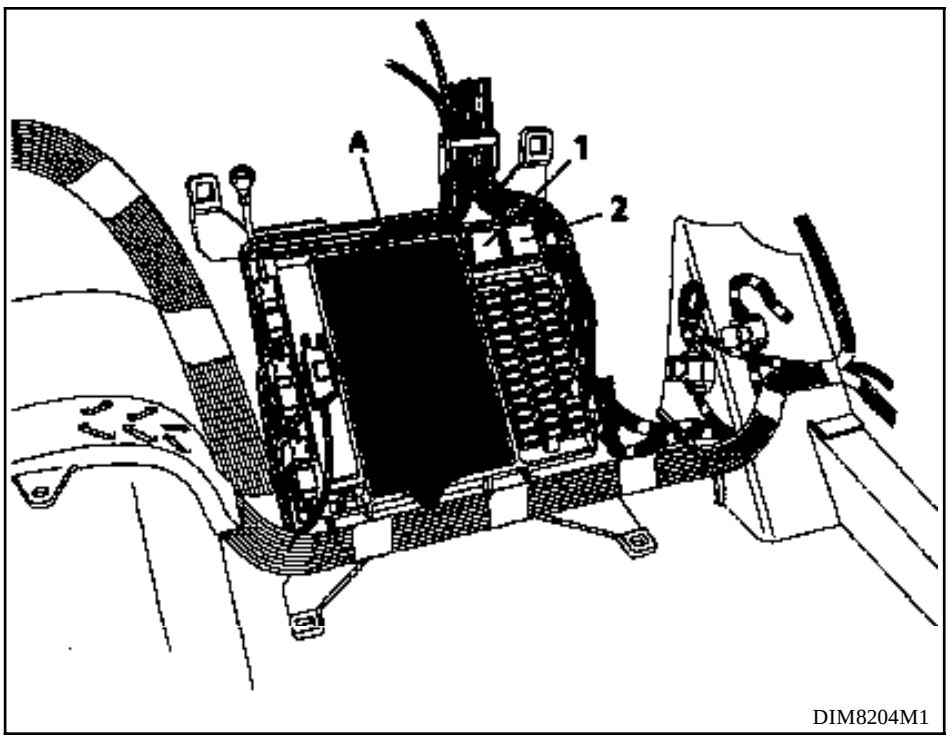
_ _ _ _ multiplex connection

A : Passenger compartment connection unit (BII)
B : Instrument panel
C : Tailgate module

COMPOSITION OF MULTIPLEX NETWORK
Multiplexing only affects «comfort» management
Passenger Compartment Connection Unit (BII)
OBD diagnostic socket
Instrument panel display
Wiring looms
Tailgate module

COMPOSITION OF THE ADDITIONAL NON-MULTIPLEX NETWORK
OBD diagnostic socket
Injection computer
ABR 5.3 computer
Radio
COA computer
Engine wiring loom

DESCRIPTION AND LOCATION OF COMPONENTS



PASSENGER COMPARTMENT CONNECTION UNIT (A).

This unit deals with and controls the following functions:
- engine immobiliser,
- door locking,
- passenger compartment lighting,
- driver's electric window,
- front wiping,
- engine information,
- sending of information to the tailgate module, for the operation of: rear wiping, rear fog lights...

It exchanges information, principally with the instrument panel and the tailgate module and also manages all the warning lights for the other instrument panel functions.

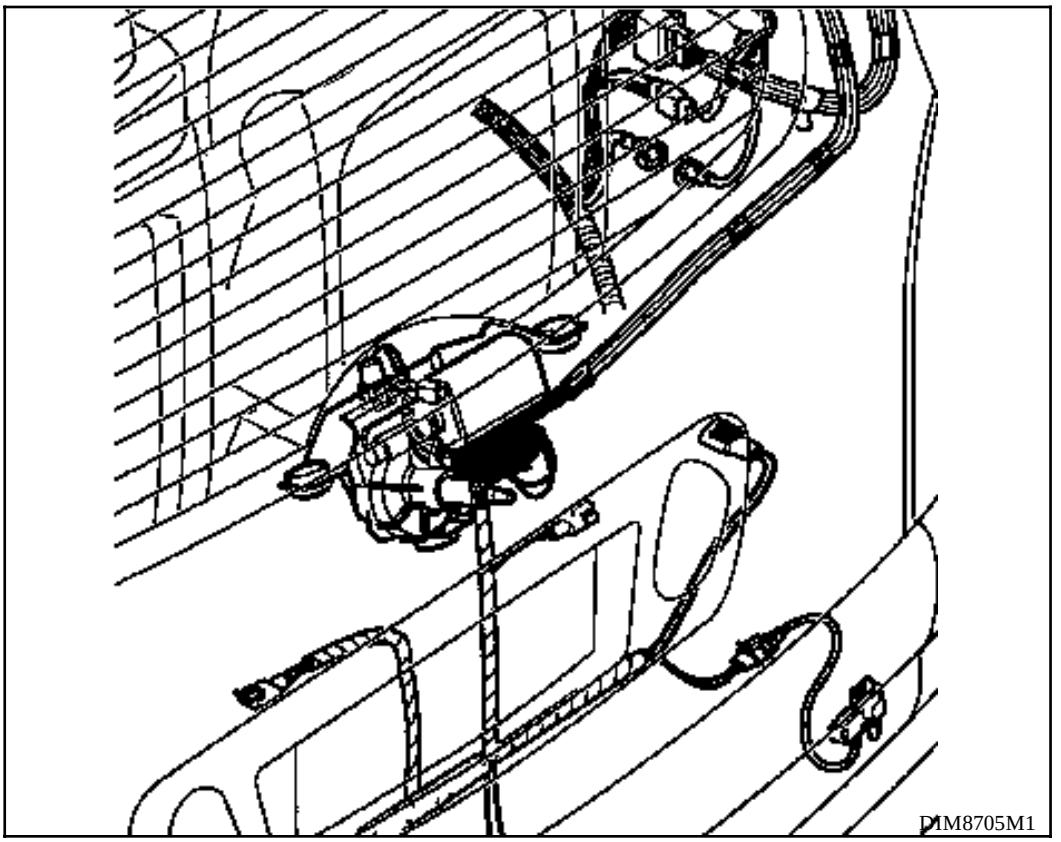
It replaces the immobiliser unit, the central flasher unit, the air conditioning relay, the rear window blocking relay and the 0 volt after TRF relay.

It centralises fault finding information which it transmits to the XR25 Cassette n°18 fault finding tool.

The Passenger Compartment Connection Unit (BII) has 4 operating modes:
- standby mode (vehicle stopped),
- pre-ignition mode (+ accessories feed or + after ignition feed),
- starting mode (+DEM),
- engine running mode.

The passenger compartment connection unit (BII) is located in the passenger footwell with the fuse box.
1 Heated rear screen relay.
2 After ignition relay.

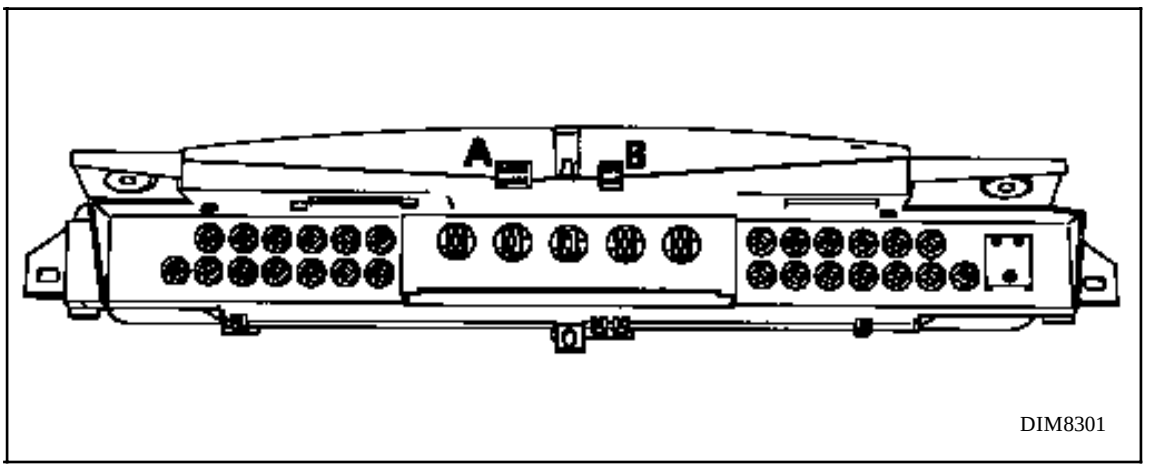
TAILGATE MODULE



It receives the passenger compartment connection unit BII information concerning rear wiping, fog lights, closure of the tailgate and the rear screen position, rear passenger compartment and number plate lighting .

It is located on the mounting for the rear screen wiper motor.

INSTRUMENT PANEL DISPLAY



DIM8301

INSTRUMENT PANEL DISPLAY

It can be identified by its connectors (A and B) of which it has two instead of four.
It centralises three independent, but inseparable functions:

- It generates the radiofrequency code (TRF) and sends the door unlocking or locking command to the passenger compartment connection unit,
- radio and audio display,
- the display of warning lights and multifunction warning lights.

FAULT FINDING PRINCIPLE

Fault finding is carried out using conventional RENAULT tools:
the XR25, NXR and a special bornier **Elé. 1506** for checking the continuities of the wiring looms.
This bornier is connected in series between the vehicle wiring loom and the passenger compartment connection unit whose function it interrupts.

Fault finding is still based on:
- the use of fault bargraphs.
- forced command modes.
- acknowledgement of driver commands.

FAULT FINDING SECTION
is comprised of the following sections:

62 Air conditioning
This fault finding is identical to that for other JE0X models with the exception of the location of air conditioning relay 474 which is contained in the passenger compartment connection unit BII.

82 Immobiliser
This fault finding and the parameters are identical to that for other JE0X models, with the exception of the location of the tracks.

83 Instrument panel
This fault finding is entirely new.
it deals with the warning lights in the form of fault charts.

87 Passenger Compartment Connection Unit BII
This fault finding is entirely new.

CONVENTIONAL FAULT FINDING
The following fault finding sections do not change:
- Pneumatic self-levelling suspension.
- Injection.
- ABS.
- Automatic Transmission.
- Radio.

IMPORTANT:

When replacing an instrument panel or a BII passenger compartment connection unit, the mileage is retained in the BII passenger compartment connection unit and instrument panel memory.

When connecting the new component, the mileage in the memory will be displayed automatically on the instrument panel or in the BII passenger compartment connection unit.

Do not carry out fault finding using a substitute component from another vehicle as the higher mileage will be memorised and will be displayed on both vehicles.

NOTES	For additional fault finding see MR 315 Fault Finding, section 62

THE AIR CONDITIONING COMPRESSOR RELAY IS INTEGRATED IN THE PASSENGER COMPARTMENT CONNECTION UNIT

THE AIR CONDITIONING DOES NOT WORK (diesel /petrol version) **Chart 1**

Chart 1	THE AIR CONDITIONING DOES NOT WORK DIESEL / PETROL VERSION

NOTES	None.

Check the fuses:
F13 : 10 A
F33 : 7.5 A
Are the fuses in good condition?

no → Replace the faulty fuse.

yes

Apply the auto-setting procedure
(see "Aid" section).
Does the customer complaint persist?

no → End of fault finding.

yes

Disconnect the driver's control and connect bornier **Elé. 1391**.
Check the supply voltages for the A / C relay:
- open circuit B14 - earth = ≈ 11.6 V
- closed circuit B14 - earth = ≈ 1 V

Are these voltages correct?

no → Repair the connections or replace the control.

yes

Bornier Elé. 1391 in place
Check the connection on track B14 of the bornier and track 16 of the yellow 26 track passenger compartment connection unit connector (B).
Is the connection correct?

no → Repair.

yes

A

AFTER REPAIR	Carry out a road test.

S66011.0

Chart 1 CONT 1	

A

Check the +12 volts on track 13 of the 16 track black passenger compartment connection unit connector (D)
Is there +12 volts?

no → Replace the passenger compartment connection unit

yes

Check the pressostat connection on tracks D and 13 of the 16 track black passenger compartment connection unit connector (D)
Is the connection correct?

no → Repair

yes

Check whether there are +12 volts on track D of the pressostat
Is there +12 volts?

no → Use the filling station to check the pressure of the refrigerant fluid circuit for a temperature of 20°C.
- P > 5 bar : replace the pressostat
- P < 5 bar : top up the freon level.

yes

Check the pressostat connection on track D and the compressor
Is the connection correct?

no → Repair

yes

FOLLOWING FAULT FINDING SEE MR 315 SECTION 62

AFTER REPAIR	Carry out a road test.

S66011.0

GENERAL

The ESPACE is equipped with a passenger compartment connection unit (BII) allowing management of:

- the immobiliser by means of a key recognition system (known as the **CODED KEY** engine immobiliser system).

- door locking and unlocking by means of a radiofrequency PLIP (TRF).

The immobiliser

A coded electronic unit (operating without a battery) which is independent of the remote control function is integrated in the head of each key for the vehicle.

When the ignition is switched on, an antenna ring located around the ignition switch interrogates and captures the code emitted by the key and transmits it to the passenger compartment connection unit.

If it recognises the code, vehicle starting is authorised.

The immobiliser is activated a few seconds after the key is removed from the ignition switch and is indicated by flashing of the red warning light located on the instrument panel.

If there is a key recognition system fault, a security code can be entered either:

- using the door locking button (it doe not matter which side) the red immobiliser warning light , or
- using the XR25.

This code will be given to the technician (on request) by the local assistance network (depending on the country, for example **Delta Assistance** on **08 00 05 15 15** for France, NVSR for the UK by fax only).

NOTE:

This system is fitted to petrol and diesel vehicles.

Petrol and direct injection diesel vehicles (example: F9Q) the immobiliser function is performed by the injection computer.

Diesel vehicle with coded solenoid valve: the immobiliser function is performed by a coded solenoid valve (on the injection pump).

IMPORTANT: ESPACE vehicles equipped with F9Q, L7X engines have a special injection computer which will only function if coded.

Door locking / unlocking

The radiofrequency with which the vehicle is equipped is used for:
- locking or unlocking of the opening elements,
- management of the courtesy lights (time delay).

The radiofrequency code is a rolling code and will therefore be different each time the PLIP is pressed to prevent possible copying.

When replacing one of the PLIPs, a resynchronisation procedure will therefore have to be carried out.

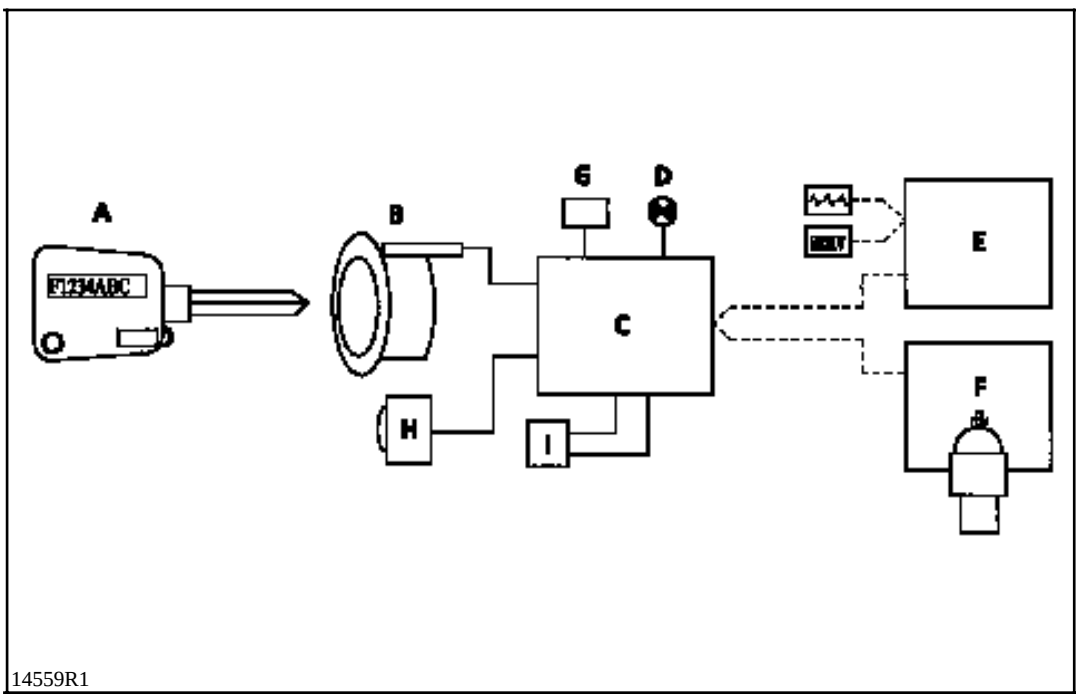
- It is no longer possible to unlock the doors with the door locking button when the remote control has been used to lock the doors.

- Door locking using the PLIP is indicated by two flashes of the hazard warning lights whilst unlocking of the doors will be indicated by one flash of the hazard warning lights.

IDENTIFICATION

On these vehicles the identification number on the key heads consists of **eight characters** beginning with the letter **F** for the radiofrequency PLIPs.

PRESENTATION OF THE SYSTEM



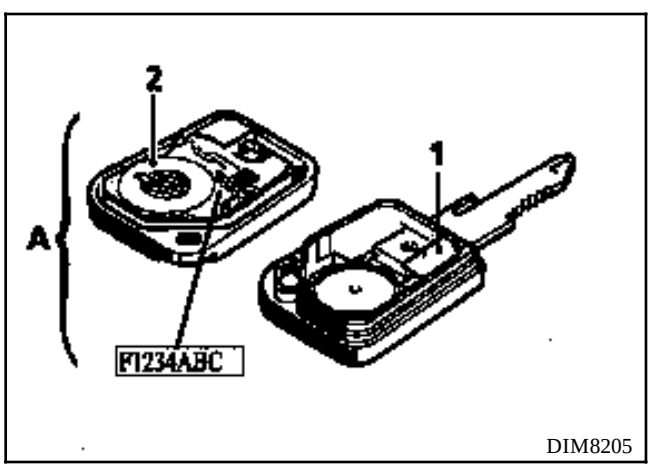
A Dual function key
B Antenna ring
C Passenger compartment connection unit BII
D Red immobiliser warning light (on the instrument panel)
E Injection computer (petrol or direct injection diesel)
F Coded solenoid valve for diesel vehicles (except direct injection diesel)
G Central door locking / unlocking button
H Radiofrequency receiver unit (on the instrument panel)
I Diagnostic socket

DESCRIPTION OF THE SYSTEM

With this system, the immobiliser is activated approximately **10 seconds** after the ignition is switched off (shown by flashing of the red immobiliser warning light).

It is composed of:

- two special matched dual function key heads equipped with:
  - a coded electronic chip allowing control of the immobiliser (1),
  - a radiofrequency remote control electronic chip (2) allowing control of locking or unlocking of the opening elements and timing of the courtesy lights.



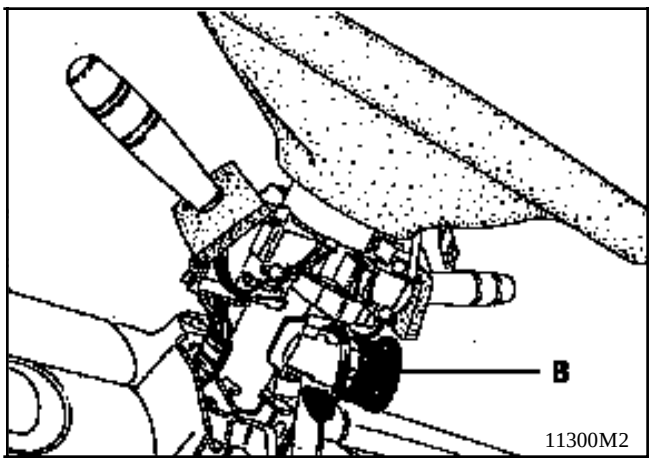
DIM8205

- An antenna ring (B) located around the ignition switch, equipped with an electronic chip responsible for transmitting the code from the keys to the passenger compartment connection unit BII (C).

  NOTE : This antenna ring is not coded.

  IMPORTANT: Do not force the ring or its connector when removing or refitting the two half-cowlings so as not to damage the coil wires.

  If these wires are damaged the key will not be recognised when the ignition is switched on.



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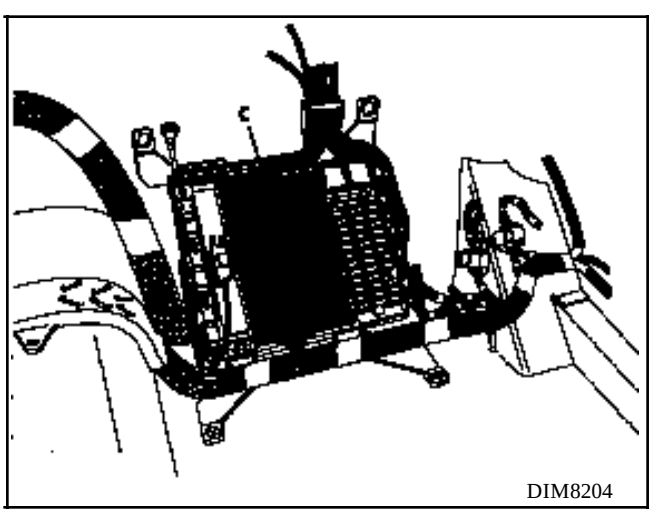
- A passenger compartment connection unit BII (C) located in the fuse box.

  It ensures the following functions:
  - the decoding of the key signal from the antenna ring,
  - management of the immobiliser system by sending a code to the injection computer (petrol or direct injection diesel) or to the coded solenoid valve for diesel vehicles (except direct injection) to authorise vehicle starting,
  - control of the red immobiliser warning light,
  - unlocking and locking of the opening elements,
  - timed illumination of the courtesy light.



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Special notes for the passenger compartment connection unit BII

When it is replaced, check the configuration.

- The central door locking button is blocked in open position when the doors have been locked using the PLIP.

- Locking of the doors using the PLIP is indicated by two flashes of the hazard warning lights whilst unlocking of the doors will be indicated by one flash of the hazard warning lights.

IMPORTANT: If one of the opening elements is not closed, or a switch is faulty when the doors are locked using the PLIP, the hazard warning lights will not operate.

- A red immobiliser warning light is located on the instrument panel and is used to:

  - signal that the immobiliser system has been activated,
  - manually enter the security code,
  - signal a system fault for diesel vehicles equipped with a coded solenoid valve (except direct injection).
  - indicate that the key has not been recognised,
  - signal that the resynchronisation mode for the door locking PLIP has been entered.

- An injection warning light (on petrol or direct injection diesel vehicles) which allows a fault on the following systems to be signalled:
  - injection,
  - immobiliser system, engine running (flashes under deceleration and at idle speed).

- A coded solenoid valve for diesel vehicles (except direct injection).

- A door locking button, located on the roof console, which also allows the security code to be entered (it does not matter which side).

IMPORTANT:

When replacing a passenger compartment connection unit BII, the mileage is retained in the instrument panel memory.

When connecting the new component, the mileage in the memory will be displayed automatically on the instrument panel.

Do not carry out fault finding using a substitute component from another vehicle as the higher mileage will be memorised and will be displayed on both vehicles.

OPERATION

When the immobiliser system is operational (approximately 10 seconds after cutting + after ignition feed), the red immobiliser warning light flashes (slow flashing; 1 flash / second).

After switching on the ignition, the antenna ring analyses the code from the key and transmits it to the passenger compartment connection unit BII.

If the code is recognised by the passenger compartment connection unit BII, it sends a code to the injection computer (petrol or direct injection diesel) or to the coded solenoid valve for diesel vehicles (except injection direct) via the coded line and extinguishes the red immobiliser warning light (after approximately 3 seconds).

At this precise moment, one of several situations may arise:

- The injection computer or the coded solenoid valve has no reference code in its memory:
  → the code sent to it is stored in its memory.
- The injection computer or the coded solenoid valve has a reference code in its memory:

  → The code sent to it is compared with its reference code.

  → If the two codes match, the computer unlocks the injection or the coded solenoid valve and authorises the engine to be started. When the ignition is switched on, the injection warning light (petrol or direct injection diesel) and the immobiliser warning light illuminate for a few seconds and extinguish, thereby indicating that the system is operating correctly.

  → If the two codes do not match, the system remains locked to prevent the engine being started. When the ignition is switched on, the injection warning light (petrol or direct injection diesel) illuminates for a few seconds and extinguishes whilst the red immobiliser warning light flashes (rapid flashing). Vehicle starting is not authorised.

NOTE: To ensure that the system operates correctly, no object (example : keyrings) should be inserted between the key and the antenna ring.

IMPORTANT: When the battery has a low charge, the drop in voltage caused by operating the starter motor may reactivate the immobiliser. If the voltage is too low, the engine cannot be started, even by pushing the vehicle.

REPLACING A KEY HEAD

The coded chip in the key head or PLIP is faulty:

- Order a replacement key head using the number in the faulty key head (eight alphanumeric characters starting with the letter **F** for radiofrequency PLIPs) and carry out the resynchronisation procedure for the PLIPs.
- If the customer requires the fault to be repaired immediately (2nd key unavailable), the instrument panel and the two key heads will have to be replaced (**see replacing a kit**).

The key has been lost:

→ Order a replacement key head using the number in the 2nd key head (eight alphanumeric characters beginning with the letter **F**) or on the label which is usually attached to the keys when the vehicle is delivered.
In this case, remember to order the metal insert for the new key head.

IMPORTANT: Do not touch the key head electronic unit when taking note of the number in the key head. If the key head electronic unit has been touched, the key must be replaced.

NOTE: If the number of the key head cannot be found (both keys and the label have been lost), the complete kit will have to be replaced (passenger compartment connection unit BII, two PLIPs, the instrument panel and the injection computer or the coded solenoid valve electronic unit).

NOTE: the door locking system cannot operate with three PLIPs (the instrument panel can only generate two different rolling codes).

PROCEDURE FOR RESYNCHRONISING THE REMOTE CONTROL UNIT

This procedure will be used when an instrument panel or PLIP is replaced, or when the PLIP code is no longer within the reception area of the instrument panel (more than 1000 consecutive presses on the PLIP out of range).

This allows the two PLIPs to be resynchronised with the instrument panel receiver unit (rolling code).

SPECIAL NOTE: With this new receiver unit in the instrument panel, it is not always necessary to resynchronise the 2nd PLIP.
If this is carried out with a single PLIP, check that the second is operating. If not, carry out the complete resynchronisation procedure for both PLIPs.

1. Switch on the ignition (to activate central door locking button feed).

2. Switch off the ignition.

3. Press the central door locking button for more than 5 seconds (the doors lock and unlock).

From this moment on, the operator has 15 seconds (indicated by illumination of the red immobiliser warning light) to carry out the following two operations.

4. Press the **1st PLIP** once (the doors lock and unlock).

5. Press the **2nd PLIP** once (the doors lock and unlock).

6. Once the procedure is completed, check that the doors lock / unlock correctly.

REPLACING THE PASSENGER COMPARTMENT CONNECTION UNIT BII ONLY

A new passenger compartment connection unit BII is not coded. Once it has been fitted on the vehicle, it will have to be programmed with the code for the keys so that it will be operational (see passenger compartment connection unit BII programming procedure).

IMPORTANT : If the customer has not left you the 2nd key, it is possible to carry out programming with **a single key**, using the XR25.

Before carrying out the programming procedure:

- Connect the XR25 to the vehicle.
- Set the selector switch to **S8** and enter the code **D67 G02* fiche N°68** .

With the ignition switched off

- Enter **G31*1*** and proceed with programming with a single key, bargraph **3 LH side** extinguishes.

NOTE : There is no operation to be carried out on the injection computer or the coded solenoid valve. It retains the same engine immobiliser code.

IMPORTANT: When a passenger compartment connection unit BII has been programmed with the code for the keys, it is impossible to remove it from the memory or to memorise another code in its place.

CONFIGURATIONS FOR THE PASSENGER COMPARTMENT CONNECTION UNIT BII.

When a passenger compartment connection unit BII is replaced, check the configuration.

With the XR25 connected, set the selector switch to **S8** and enter the code **D67 then fiche N°67.**

See configuration in section 87.

PROCEDURE FOR PROGRAMMING THE PASSENGER COMPARTMENT CONNECTION UNIT BII

This procedure may be carried out once only by the passenger compartment connection unit BII. As long as this procedure has not been carried out, it remains impossible to start the vehicle.

NOTE: Where programming is impossible, check the transponder ring / passenger compartment connection unit BII connection and visually check the antenna ring (see fault finding). If the coil wires are damaged, the ring will have to be replaced.

The procedure may be carried out:

- With **both keys** (which allows verification that the keys are matched).

  NOTE : the procedure will not work if the same key is used twice or if the keys are not matched.

- With **a single key**, using the XR25 (where the customer has not left both keys at the workshop).

The XR25 may be used for this procedure but it is not vital (except for programming with a single key, see replacement of the passenger compartment connection unit BII only).

1. Connect the XR25 to the vehicle, set the selector switch to **S8** and enter the code **D67 G02*** (fiche N°**68**), bargraphs **17 RH side and 19 LH side** must be illuminated (programming not carried out).

2. Switch on the ignition (without activating the starter motor) with the 1st key (approximately 2 seconds). Bargraph **18 RH side** and **LH side** illuminate. From this moment, the operator has 4 minutes to carry out the following operation.

3. Switch on the ignition (without activating the starter motor) with the 2nd key (approximately 2 seconds). Bargraphs **18 RH side**, **LH side and 19 LH side** extinguish.
The red immobiliser warning light flashes rapidly.

4. **Switch off the ignition and** switch it on again for a few seconds (without activating the starter motor) to send the code to the injection computer or to the coded solenoid valve.

5. Check that the immobiliser system is operating correctly:

→ with the ignition switched off, the red immobiliser warning light should flash (slow flashing). Bargraph **10 LH side** should be illuminated. The vehicle should not be able to be started using other keys.

NOTE : To simulate starting prevention, **with the ignition switched off**, wait for the red immobiliser warning light to start flashing slowly. Enter command **G04***, bargraph **9 LH side** illuminates.

Switch on the ignition, the red immobiliser warning light flashes more quickly and it should be impossible to start the vehicle

6. Once the procedure has been completed, check that the system is operating correctly. Switch the ignition off then on again and check that the red warning light illuminates for 3 seconds then extinguishes and that the vehicle can be started.

NOTE : If the programming procedure has failed, wait for bargraphs **18 LH side and RH side** to extinguish before trying again with both keys.

When a passenger compartment connection unit BII has been replaced, check the configuration.

Special notes on PLIPs

If the key programming procedure (immobiliser function) has been carried out with the **original** keys, the PLIPs will then be immediately operational (unit correctly configured).

If the programming procedure (immobiliser function) has been carried out with a **single** original key (using the command **G31*1***) only the PLIP for that key will be operational.
For the 2nd PLIP to work, it will have to be resynchronised.

Check the operation of the PLIPs. After programming (bargraphs **17 LH side** and **RH side** should extinguish).

IMPORTANT:

When replacing the passenger compartment connection unit BII and the instrument panel, to retain the vehicle mileage:

It is necessary to:
- **With the ignition switched off,**
- **Disconnect and remove the instrument panel.**
- **Replace and connect the new instrument panel.**
- **Switch on the ignition for approximately 5 seconds, the mileage in the passenger compartment connection unit BII memory will be inscribed in the new instrument panel.**
- **Switch off the ignition.**
- **Disconnect and remove the passenger compartment connection unit BII.**
- **Switch on the ignition for approximately 5 seconds, the mileage in the memory of the new instrument panel will be entered into the new passenger compartment connection unit BII.**
- **Programme the keys.**
- **After repair, the fault memorised in the passenger compartment connection unit BII will have to be erased by entering the command mode G0** into the XR25.**

REPLACING A KIT
(passenger compartment connection unit BII, two key heads and the instrument panel, when the old security code is known)

If a kit has to be replaced, it will be necessary to:

- Programme the codes for the two new PLIPs into the passenger compartment connection unit BII (supplied uncoded).

- Erase the old code memorised in the injection computer or in the coded solenoid valve electronic unit using the procedure for entering the security code (the code number for the old kit can be requested from the local assistance network, for example **DELTA Assistance** for France, NVSR for the UK by fax only).

- Synchronise the PLIPs.

IMPORTANT : To erase the old code (memorised in the injection computer or in the coded solenoid valve electronic unit), the procedure described below MUST be followed, in the order given.

In effect, the injection computer code or coded solenoid valve electronic unit code can only be erased using the security code (**with the number for the old connection unit)** if the new connection unit fitted to the vehicle has been programmed with a code (which is the case in the procedure which follows).

NOTE : If the security code introduced into the connection unit is the same as the injection computer or the coded solenoid valve, it will not be decoded.

1. Fit the metal inserts from the old keys into the new key heads

2. Note the number of one of the old key heads to obtain the security code.

3. Remove the passenger compartment connection unit BII (with the ignition switched off).

4. Fit the new passenger compartment connection unit BII in place (with the ignition switched off).

5. Connect the XR25, (fault finding fiche **N°68**) set the selector to **S8** and enter the code **D67 G02*.** Bargraphs **17 RH side and 19 LH side** should be illuminated (programming not carried out).

6. Switch on the ignition (without activating the starter motor) using the 1st key (approximately 2 seconds). Bargraphs **18 RH side** and **LH side** Illuminate. From this moment, the operator has 4 minutes to carry out the following operation.

7. Switch on the ignition (without activating the starter motor) using the 2nd key (approximately 2 seconds). Bargraphs **18 RH side** and **LH side and 19 LH side** extinguish. The red warning light flashes rapidly.

8. Switch the ignition off then on again for a few seconds and check that the warning light is illuminated.

9. Switch the ignition off then on for more than 10 consecutive seconds.

10. Switch off the ignition and wait for the red warning light to start to flash slowly. With the ignition switched off enter **G04*,** bargraph **9 LH side** illuminates.

11. Switch on the ignition, the red warning light flashes rapidly.

Then follow the procedure for entering the security code (operation 3, 4, 5 and 6 of the procedure for entering the security code using the door locking button or the XR25) using the code number corresponding to the old kit. This allows the old code memorised in the coded solenoid valve electronic unit or in the computer to be erased.

IMPORTANT: If the security code from the old kit is entered using the XR25, it is normal for the display to indicate "fin" when it is validated.
The passenger compartment connection unit BII in place does not correspond to this code. Ignore it and check whether the vehicle will start. If the vehicle does not start, check the code and restart the procedure.

IMPORTANT: ESPACE vehicles equipped with F9Q, L7X engines have a special injection computer which will only function if coded.

NOTE: On petrol or direct injection diesel vehicles, using the XR25, it is possible to check that the injection computer has been decoded correctly (as part of injection fault finding).

Connect the XR25 to the diagnostic socket. Set the ISO selector and enter the injection code.

Petrol vehicle:
Bargraph 2 RH side (immobiliser) should be illuminated and after entering *22, the text "2 def" should appear on the XR25 display. Erasure has been successful.

Direct injection diesel vehicle:
Bargraph 15 LH side (immobiliser) should be illuminated and after entering *15, the term "2 def" should appear on the XR25 display. Erasure has been successful.

- If the display indicates "1 def" this indicates a fault on the coded line. In this case, repair and restart the procedure.

- If bargraph 2 RH side or 15 LH side depending on engine (immobiliser) is extinguished and the display indicates "bon" (*22 or *15 depending on engine), this indicates that the code in the injection computer has not been erased. In this case check the conformity of the emergency code number and repeat the procedure.^

12. Switch the ignition off then on again for a few seconds without activating the starter motor to programme the immobiliser code of the new kit into the coded solenoid valve electronic unit or into the injection computer. The red warning light should illuminate for **3 seconds** then extinguish.

NOTE:

- **On petrol or direct injection diesel vehicles**, using the XR25, check that the code has been programmed into the computer.

  Petrol vehicle:
  Bargraph **2 RH side** (immobiliser) should be extinguished and after entering ***22** the display indicates "**bon**". The injection computer coding is complete. If the display indicates "**2def**", the injection computer has not yet been coded.

  Direct injection diesel vehicle:
  Bargraph **15 LH side** (immobiliser) should be extinguished and after entering ***15** the XR25 display should indicate "**bon**". The injection computer coding is complete. If the display indicates "**2def**", the injection computer has not yet been coded.

- **On diesel vehicles with a coded solenoid valve**, when the ignition is switched on, check that the immobiliser warning light extinguishes after **3 seconds**.

13. Check that the system is operating correctly.
  Switch on the ignition and check that the red warning light illuminates for **3 seconds** then extinguishes and that the vehicle starts.

NOTE: It is possible to check starting prevention using the XR25.

- Switch off the ignition, wait until the red warning light flashes (slow flashing) and enter **G04***.

- Switch on the ignition and check that it is impossible to start the vehicle and that the red warning light flashes (rapid flashing).

14. The procedure is complete. After switching the ignition off then on again (for more than 2 seconds), check that the vehicle can be started.

NOTE: if the programming procedure fails, wait for bargraphs **18 LH side and RH side** to extinguish before trying again with both keys.

15. **When replacing a passenger compartment connection unit BII, check the configuration.**

SPECIAL NOTES FOR FITTING AN INJECTION COMPUTER

IMPORTANT

ESPACE vehicles equipped with F9Q, L7X engines have a special injection computer which only functions if it is coded.

Consequently, you are strongly advised not to carry out tests using a computer borrowed from the store or on another vehicle to prevent coding procedures which would make the computers unusable as a result.

TEST

In injection fault finding, it is possible to determine the condition of the computer.

Connect the XR25 to the vehicle and enter the code corresponding to the type of injection.

- If the injection computer is not coded.

  Petrol vehicle
  Bargraph **2 RH side** (immobiliser) should be illuminated and after entering ***22**, the term "**2def**" should appear on the XR25 display.

  Direct injection diesel vehicle
  Bargraph **15 LH side** (immobiliser) should be illuminated and after entering ***15**, the term "**2def**" should appear on the XR25 display.

- If the injection computer is coded and there is no fault on the coded line.

  Petrol vehicle:
  Bargraph **2 RH side** should be extinguished and after entering ***22**, the term "**bon**" should appear on the XR25 display (even if the computer coding does not correspond to the vehicle).

  Direct injection diesel vehicle
  Bargraph **15 LH side** should be extinguished and after entering ***15**, the term "**bon**" should appear on the XR25 display (even if the computer coding does not correspond to the vehicle).

NOTE: If a fault has been noted on the coded line by the injection computer, the term "**1def**" will appear on the XR25 display after entering ***22** (Bargraph **2 RH side** should illuminate). In this case, repair and erase the fault using command **G0** or** by disconnecting the battery.

REPLACING THE INJECTION COMPUTER (petrol and direct injection diesel vehicles)

The injection computer is supplied uncoded. The engine immobiliser code must therefore be programmed in when the computer is fitted to enable the vehicle to be started.

IMPORTANT: ESPACE vehicles equipped with F9Q, L7X engines have a special injection computer which will only function if coded.

It is sufficient to carry out the following operations:

- Switch on the ignition for a few seconds using the coded key.
- Switch off the ignition, the immobiliser function will be ensured approximately 10 seconds afterwards (the red immobiliser warning light flashes).
- Check that the system is operating correctly. Switch on the ignition and check that the red warning light illuminates for 3 seconds then extinguishes and that the vehicle starts.

NOTE:

It is possible to check starting prevention using the XR25:

- Use fault finding fiche **N° 68** and enter the code **D67 then G02*** on the XR25.
- To simulate starting prevention, **with the ignition switched off**, wait until the red immobiliser warning light begins to flash slowly. Enter command **G04***, ignition still switched off (Bargraph **9 LH side** illuminates).
- Switch on the ignition, the red immobiliser warning light flashes more rapidly and it should be impossible to start the vehicle.
- The procedure is complete. After switching the ignition off then on again (for more than 2 seconds), check that the vehicle can be started.

REPLACING THE CODED SOLENOID VALVE ELECTRONIC UNIT (except direct injection diesel)

For the operation to remove and refit the screening which allows access to the coded solenoid valve and the electric stop, see the Technical Note (N.T. 2717A and page 82-17).

The electronic unit for the solenoid valve is supplied uncoded. The immobiliser system code must therefore be programmed in when it is fitted to enable the vehicle to be started.

It is sufficient to carry out the following operations:

- Switch on the ignition for a few seconds using the vehicle's coded key.
- Switch off the ignition, the immobiliser function will be ensured approximately 10 seconds afterwards (The red immobiliser warning light flashes).

NOTE:

It is possible to check starting prevention using the XR25:

- Use fault finding fiche **N° 68** and enter the code **D67 then G02*** on the XR25.
- To simulate starting prevention, **with the ignition switched off**, wait until the red immobiliser warning light begins to flash slowly. Enter command **G04***, ignition still switched off (Bargraph **9 LH side** illuminates).
- Switch on the ignition, the red immobiliser warning light flashes more rapidly and it should be impossible to start the vehicle.
- The procedure is complete. After switching the ignition off then on again (for more than 2 seconds), check that the vehicle can be started.

DECODING PROCEDURE

This procedure will only work if the old security code is known.

IMPORTANT:

The decoding procedure involves replacing the passenger compartment connection unit (BII) of the vehicle with another passenger compartment connection unit (BII) with a different code and entering the vehicle security code (security code number to be requested from the local assistance network depending on the country, for example **Delta Assistance on 0800 05 15 15** for France, NVSR for the UK by fax only), using the number in the vehicle key head.

1. With the ignition switched off, fit a new passenger compartment connection unit (BII) coded with a different number in place of the passenger compartment connection unit (BII) originally fitted to the vehicle (the procedure will not work with an uncoded passenger compartment connection unit (BII) or one which is coded with the same number as the ignition).

2. Switch on the ignition, the red immobiliser warning light flashes (rapid flashing).

3. Enter the vehicle security code (number corresponding to that on the original key).

4. After entering the security code, the red warning light flashes again. On the XR25, "**2def**" should be read on the display (in injection fault finding ***22 or *15** depending on engine). This indicates that the injection computer has been decoded.

IMPORTANT:

When replacing a passenger compartment connection unit BII, the mileage is retained in the instrument panel memory.

When connecting the new passenger compartment connection unit BII, the mileage in the instrument panel memory will be displayed automatically in the passenger compartment connection unit.

Do not carry out fault finding using a substitute component from another vehicle as the higher mileage will be memorised and will be displayed on both vehicles.

SPECIAL NOTES FOR TESTING A CODED SOLENOID VALVE

IMPORTANT

When testing an uncoded solenoid valve electronic unit borrowed from the store (test part), the unit **MUST NOT** be fed during the operation.

Switching the ignition on will send a coded signal from the decoder unit to the solenoid valve electronic unit (the code is programmed).

To avoid memorising a code which could disable the electronic unit of the coded solenoid valve after testing, the blue 26 track connection unit connector must be disconnected. The coded signal will therefore not be sent when the ignition is switched on (the solenoid valve electronic unit will remain uncoded).

SYSTEM FAULT, ENGINE RUNNING

Petrol or direct injection diesel vehicle

If a fault in the system is noted by the injection computer when the engine is running, the injection warning light on the instrument panel will flash during deceleration and at idle speed (speed less than **1 500 rpm**).

IMPORTANT: In this case, after repair, the fault memorised in the injection computer will have to be erased by entering command mode **G0**** using the XR25 or by disconnecting the battery (**approximately 2 minutes**), to allow the engine immobiliser system to operate again.

NOTE: This fault may be shown by the XR25 (in injection fault finding).

Connect the XR25 and enter the injection code.

The fault is indicated by bargraph **2 RH side**.

After entering ***22**, the term "**1def**" on the XR25 display indicates a coded line fault.

Direct injection diesel vehicles

The fault is indicated by bargraph **15 LH side**.

After entering ***15**, the term "**1def**" on the XR25 display indicates a coded line fault.

Diesel vehicle with coded solenoid valve

If a system fault is detected by the passenger compartment connection unit BII when the engine is running, the red immobiliser warning light will illuminate until the ignition is switched off.

IMPORTANT: In this case, after repair, the fault memorised in the passenger compartment connection unit BII will have to be erased by entering command mode **G0**** using the XR25 or by disconnecting the battery (**approximately 2 minutes**), to allow the engine immobiliser system to operate again.

NOTE: This fault is shown by the XR25 and by the fault finding for the passenger compartment connection unit BII (fiche **N°68**).

Connect the XR25.

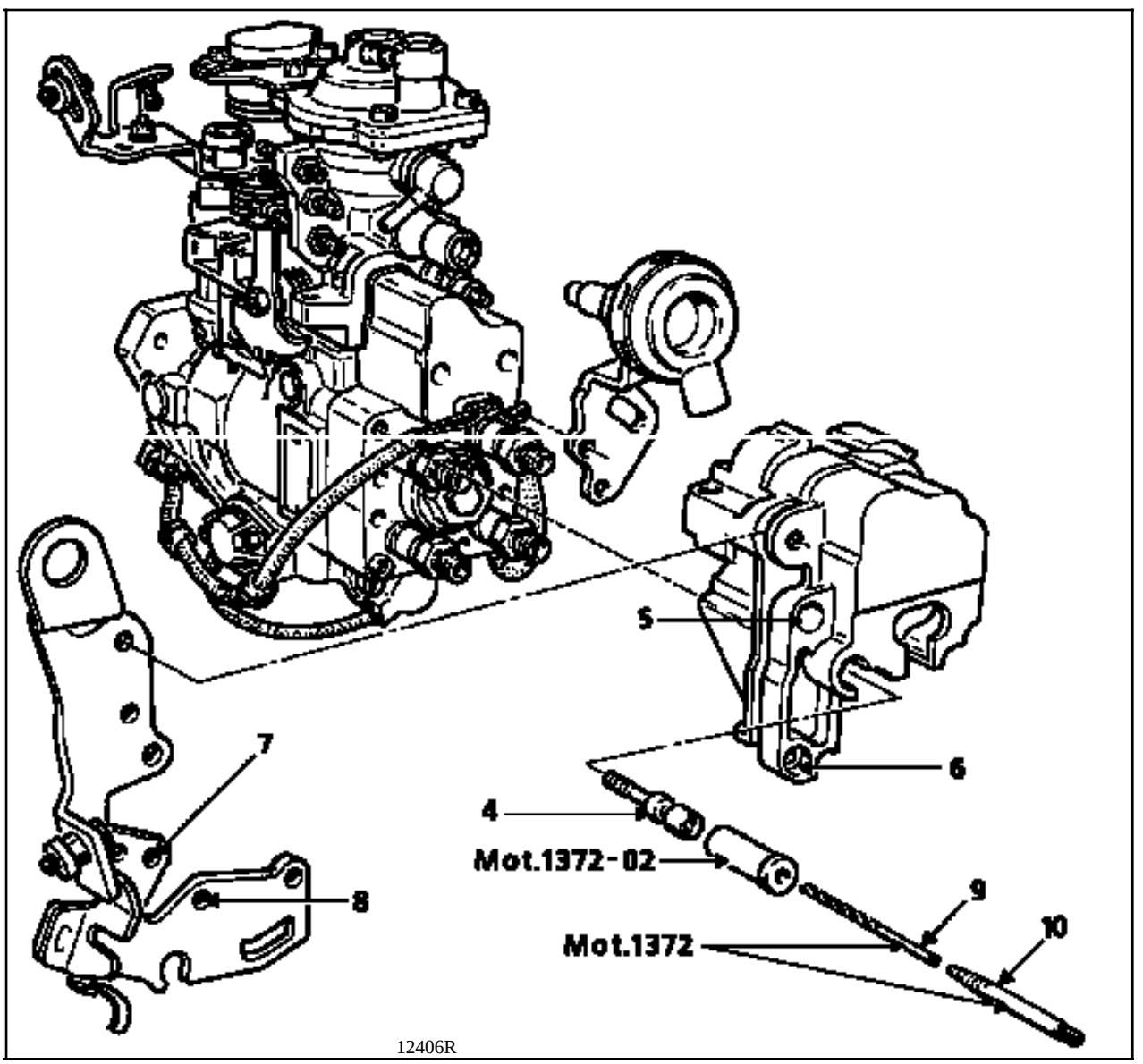
Set the selector switch to **S8** and enter the code **D67 then G02***.

The fault is indicated by bargraphs **6 LH side or 6 RH side**.

REPLACING THE CODED SOLENOID VALVE ELECTRONIC UNIT see NT N° 2717A (diesel vehicle, BOSCH pump)

SPECIAL TOOLING REQUIRED	
Mot. 1372	**Kit for removing the self-shearing bolts from the computers**
Mot. 1372-02	**Drilling tube for self-shearing bolts**
Mot. 1383	**Tool for removing high pressure diesel pipes**

Drill the five self-shearing bolts (4), (5), (6), (7) and (8), to a length of **4 mm** using the drilling tube **Mot. 1372-02** and the **4 mm diameter** drill bit (9), supplied in kit **Mot.1372** (the quality of the bit used to drill the self-shearing bolt (4) is very important. Use a tungsten carbide bit).



When drilling:
- support the drilling tube,
- lightly oil the bit.

Use the extractor (10) and its handle to remove the bolts.

PROCEDURE FOR ENTERING THE SECURITY CODE

With this immobiliser system, the procedure for entering the security code is managed by the passenger compartment connection unit .

The code will be entered:
- using the door locking button and the red immobiliser system warning light.
- using the XR25.

The security code can only be entered if the immobiliser system is active. The red warning light should flash when the ignition is switched on (rapid flashing).

After determining the security code number, carry out the following operations:

Using the XR25

1. With the ignition switched off, the red immobiliser warning light should flash (slow flashing).

2. Switch on the ignition, the injection warning light (petrol or direct injection diesel vehicle) illuminates for approximately **3 seconds** then extinguishes whilst the red immobiliser warning light flashes more rapidly.

3. Connect the XR25, use fault finding fiche **N°68**, set the selector to **S8** and enter the code **D67 then G02*.**
Bargraph **10 LH side** should be illuminated.

4. Enter command **G40* then the security code and validate with key *.**

- **If the code is correct,**" **bon**" is displayed on the XR25 and bargraph **10 LH side** extinguishes.

- **If the code is not correct,**"**déf**" is displayed on the XR25 and bargraph **10 LH side** remains illuminated.

Using the central door locking button

After determining the security code number, carry out the following operations:

1. With the ignition switched off, the red immobiliser warning light should flash (slow flashing).

2. Switch on the ignition, the injection warning light (petrol or direct injection diesel vehicle) illuminates for approximately **3 seconds** then extinguishes whilst the red immobiliser warning light flashes more rapidly.

3. Press and hold the central door locking button (it does not matter which side), the red warning light extinguishes.

4. Without releasing the button, the warning light will flash very slowly (every **1.5 seconds**) to generate a counting sequence.
Count the number of times the red warning light illuminates and release the button when the value of the 1st figure of the security code is reached.

5. Press the door locking button again.
Count the number of times the red warning light illuminates and release the key when the value of the 2nd figure of the security code is reached.

6. Repeat operation "**5**" to enter the last two figures for the security code.

After entering the 4th figure of the security code:

- **If the code is correct**, it is possible to start the engine.

  The red immobiliser warning light should illuminate for approximately **3 seconds**, extinguish for approximately **3 seconds** and re-illuminate for approximately **30 seconds**.

  This warning light illumination cycle will repeat whenever the ignition is switched on and as long as the vehicle is unprotected (up to approximately 10 minutes after the ignition is switched off). This serves to remind the customer that his vehicle is no longer protected.

  The vehicle will again be protected either:
  - approximately **10 minutes** after the ignition is switched off (automatic starting),
  - after the battery is disconnected.

- **If the code is incorrect**, the engine cannot be started.

  The red immobiliser warning light flashes .

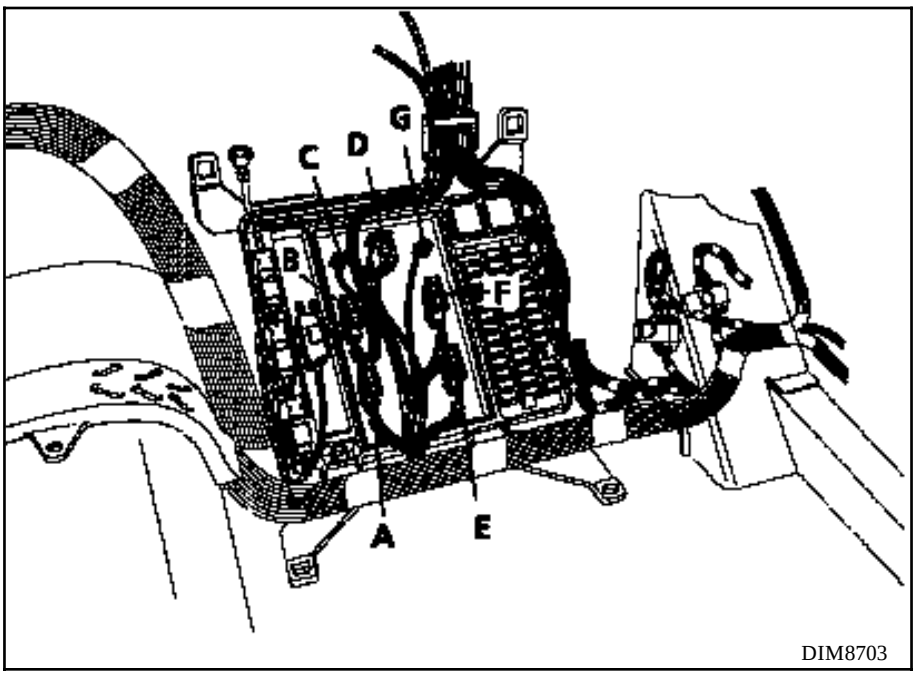
  Switch off the ignition, then repeat the procedure for entering the code.

  IMPORTANT: You may make three attempts to enter the code. If, after the third attempt, the code is invalid, you must wait for approximately 15 minutes before making another attempt.
  When this period has expired, switch the ignition off and on again and 3 more attempts may be made.

  NOTE: This procedure does not decode the injection computer or the coded solenoid valve (depending on engine), it only authorises the starting of the vehicle.

  REMINDER: The ignition must be turned off and on again between two code tests.

PASSENGER COMPARTMENT CONNECTION UNIT BII CONNECTIONS



26 TRACK YELLOW CONNECTOR (A)

Track	Allocation
1	Reverse
2	Diagnostic information (line L)
3	0 volt outside temperature sensor
4	Tailgate module / connection unit connection
5	+ protected accessories feed
6	- EC5 air bag fault warning light
7	+ left hand side lights
8	+ rear screen washer pump
9	- rear left and right door switch
10	- driver's electric window one touch raise control
11	- driver's electric window normal raise control
12	- 1st line courtesy light
13	+ 12 V before ignition feed to passenger compartment connection unit
14	- SDM air bag fault warning light
15	Diagnostic information (line K)
16	Outside temperature sensor information.
17	+ after ignition feed windscreen wiper
18	- front left hand door switch
19	+ main beam headlights
20	+ windscreen washer pump
21	+ dipped headlights
22	- seat belt information
23	- front right hand door switch
24	driver's electric window normal lower control
25	- handbrake information
26	- rear electric window blocking control

26 TRACK YELLOW CONNECTOR (B)

Track	Allocation
1	+ instrument panel rheostat
2	+ air conditioning rheostat
3	- right hand indicator control via stalk
4	- hazard warning lights timed / control information
5	central door locking button opening control
6	- fast speed windscreen wiper control via stalk information
7	- timed rear wiper start information
8	antenna ring / connection unit coded line
9	+ antenna ring feed
10	+ rheostat information (knob)
11	+ front fog lights relay
12	+ rear screen wiper timer
13	Diag link H instrument panel information
14	- interior lighting via switch
15	- passenger compartment lighting via relay
16	- control panel A / C relay
17	- left hand indicator control
18	central door locking button close control
19	- ADAC sequence
20	- slow speed windscreen wiper information
21	Antenna ring earth
22	Antenna ring interrogation
23	0 volt rheostat potentiometer
24	+ rear fog lights control
25	+ 12 V instrument panel protected before ignition feed via passenger compartment connection unit
26	Diag link L instrument panel information

1 TRACK WHITE CONNECTOR (C)

Track	Allocation
1	Earth

16 TRACK BLACK CONNECTOR (D)

Track	Allocation
1	Right hand indicator output
2	Left hand indicator output
3	Driver's electric window raise
4	Driver's electric window lower
5	Not used
6	+ central door locking button close
7	+ central door locking button open
8	+ fast speed windscreen wiper
9	+ windscreen wiper
10	+ front fog lights via relay
11	+ front fog lights
12	- passenger compartment lighting via relay
13	+ air conditioning authorisation via pressostat
14	- rear right hand side electric window authorisation
15	- rear left hand side electric window authorisation
16	+ slow speed windscreen wiper

12 TRACK BLUE CONNECTOR (E)

Track	Allocation
1	- automatic transmission fault warning light
2	Not used
3	- door open output
4	LPG level information
5	LPG fuel selection information
6	Not used
7	- self-levelling suspension fault warning light
8	Not used
9	Not used
10	Not used
11	Fuel flow information
12	- heated seat warning light

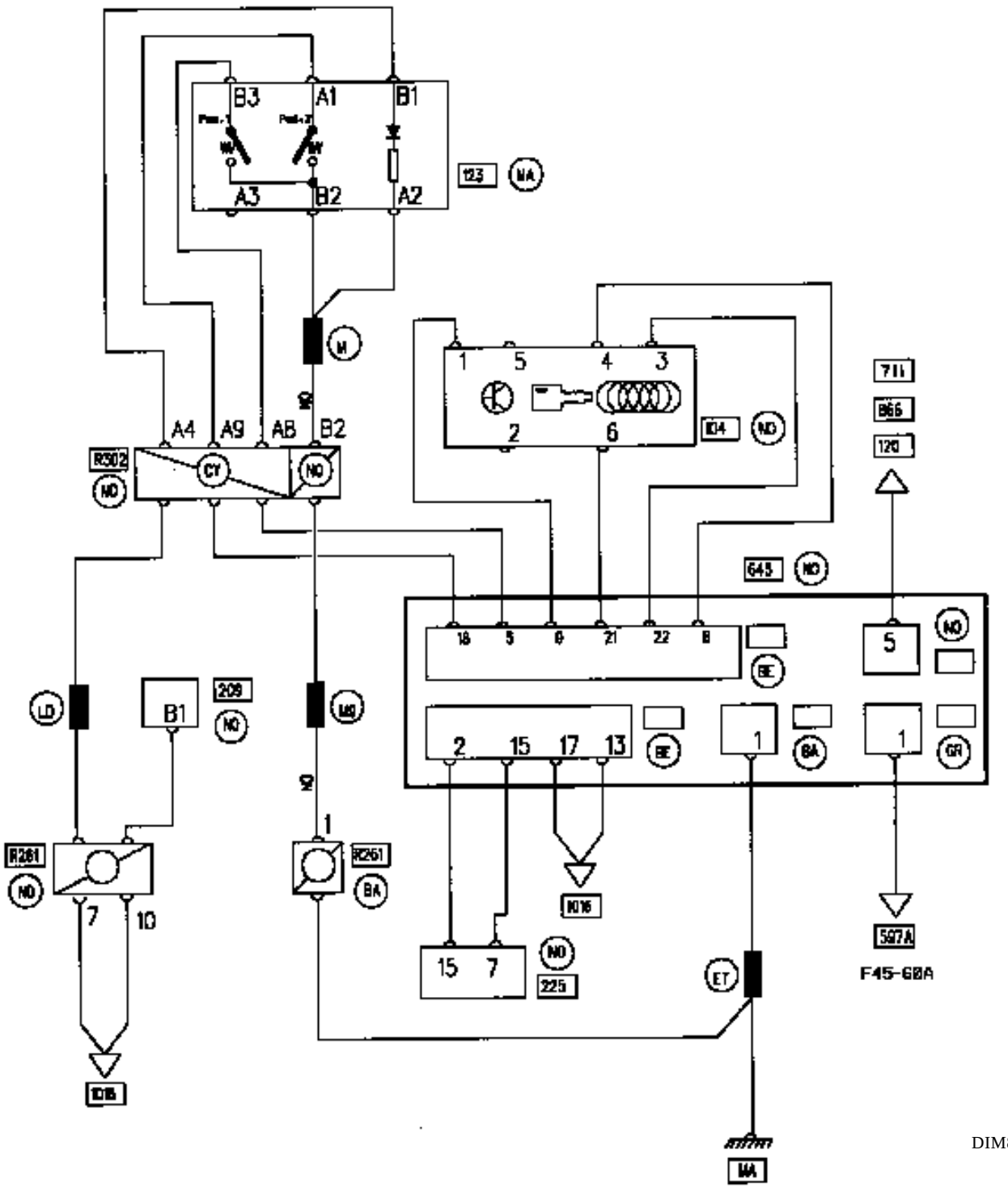
26 TRACK BLUE CONNECTOR (F)

Track	Allocation
1	Coolant temperature information
2	Fuel level information
3	Oil level sensor information
4	TDC information
5	Headlight washer control
6	+ alarm close information
7	+ motor 1 fan assembly battery
8	- brake fluid level information
9	- brake pad wear warning light
10	Not used
11	Not used
12	- charge warning light
13	- ABS warning light
14	Not used
15	0 volt fuel gauge
16	0 volt oil level
17	Secondary fan speed information
18	Injection / diesel coded information
19	+ alarm open information
20	+ motor 2 fan assembly
21	- injection fault warning light
22	- oil pressure warning light
23	- catalytic converter overheating warning light
24	- preheating warning light
25	- windscreen wiper park
26	- coolant temperature warning light

1 TRACK GREY CONNECTOR (G)

Track	Allocation
1	+ battery

WIRING DIAGRAM



COMPONENTS KEY

104 Ignition switch (antenna ring)
120 Injection computer
123 Door locking button (for entering security code)
225 Diagnostic socket
597 Engine fuse box
711 Coded solenoid valve
866 Diesel injection computer
1016 Passenger compartment fuse box

FAULT FINDING - INTRODUCTION

SETTING UP XR25 / PASSENGER COMPARTMENT CONNECTION UNIT BII DIALOGUE

- Connect the XR25 to the diagnostic socket.
- Set the ISO selector to **S8**
- Enter **D67 then G02***
- Fiche N°68

2.n68

WARNING :

When carrying out checks using a multimeter, avoid using a test pin on connectors where the size of the test pin could damage the terminals and lead to a poor contact.

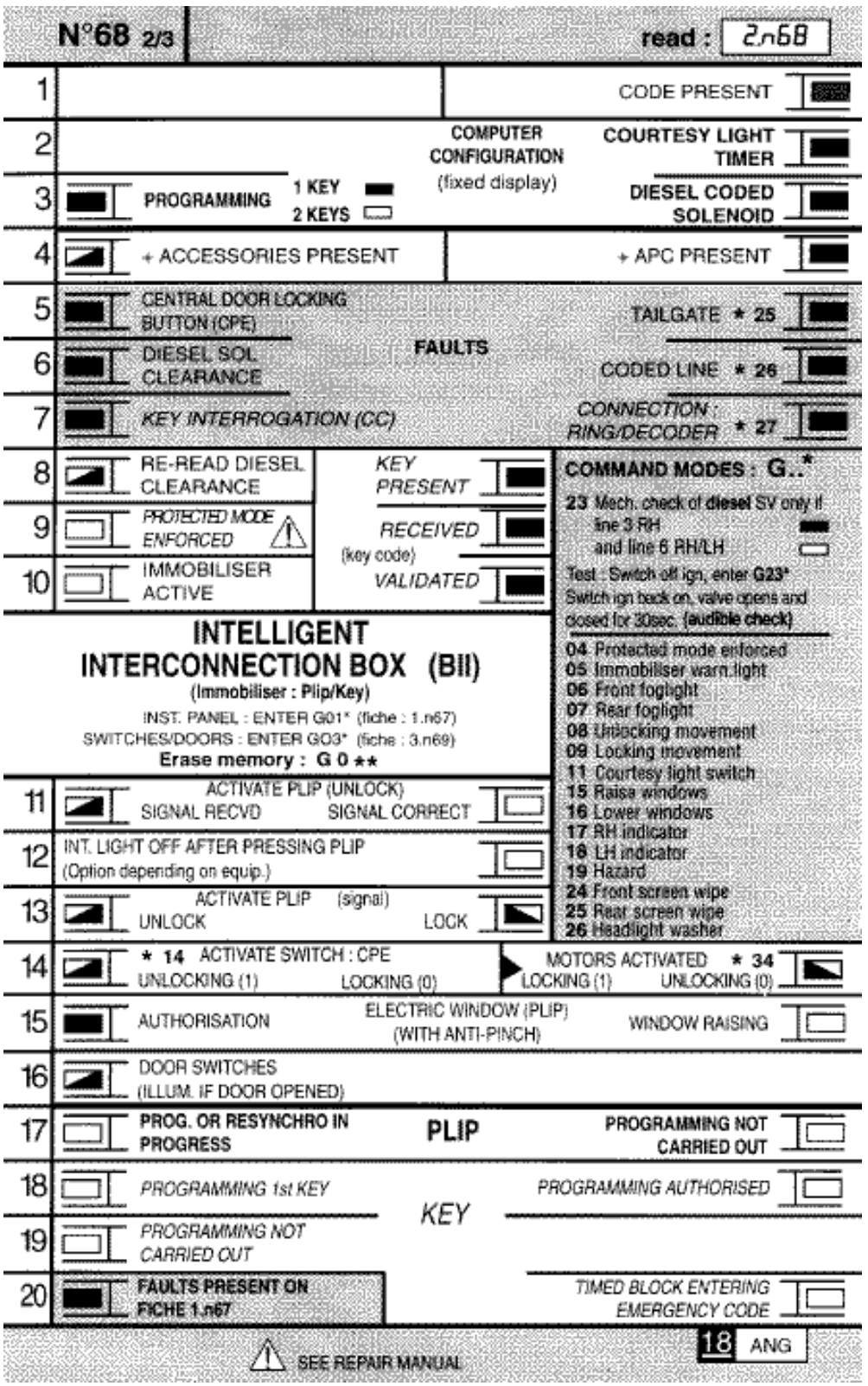
IDENTIFICATION OF ENGINE IMMOBILISER FAULT BARGRAPH ON THE PETROL INJECTION FICHE

To check whether the "engine immobiliser fault" bargraph is illuminated on the injection fiche corresponding to the vehicle, use the fiches corresponding to the type of engine).

ERASING THE MEMORY AND EXITING FAULT FINDING

After repairing the engine immobiliser system, enter G0** on the XR25 keyboard to erase the memorised fault and **G13*** at the end of fault finding.

XR25 fault finding fiche
fiche N°68



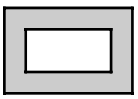
FI21868

REPRESENTATION OF THE BARGRAPHS

Illuminates when dialogue is established with the product computer, if it remains extinguished:
- the code does not exist,
- there is a line, XR25 or computer fault.

REPRESENTATION OF FAULTS (always on a coloured background)

If illuminated, indicates a fault on the product tested. The associated text defines the fault.

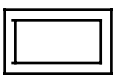
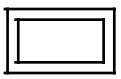


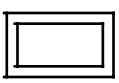
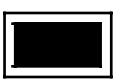
If extinguished, indicates that no fault was detected on the product tested.

REPRESENTATION OF STATUS (always on a white background)

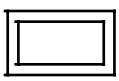
Engine stopped, ignition on, no operator action

The status bargraphs on the fiche are represented in the condition they should be in when the engine is stopped, ignition on, with no operator action.

- If on the fiche, the bargraph is shown  extinguished 
- If on the fiche, the bargraph is shown  illuminated 
- If on the fiche, the bargraph is shown  illuminated when the function or condition on the fiche is met.

either  or 

Engine running



Extinguished when the function or condition specified on the fiche is no longer being met.

Illuminated when the function or the condition specified on the fiche is being met.

Fiche n° 27 is a generic fiche used for several engines.

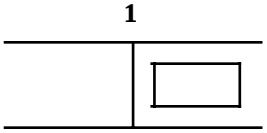
The various engines do not use all the bargraphs. To know which bargraphs are dealt with by the injection computer, after entering into dialogue, press keys V and 9 simultaneously.

The bargraphs dealt with will:

- illuminate, if it is a bargraph for a fault which cannot be memorised or for status bargraphs,
- flash, if they are fault bargraphs which can be memorised.

To return to fault finding mode, press key D.

FAULT FINDING - INTERPRETATION OF XR25 BARGRAPHS

1 	**Bargraph 1 RH side extinguished** Fiche n° 68 side 2 / 3 CODE PRESENT

NOTES	None.

Check the condition of the + before ignition feed fuses.

Replace the fuse(s) if necessary.

Ensure that the XR25 is not the cause of the fault by trying to communicate with another computer on the vehicle (air bag computer, injection computer, ...).

Check that the ISO selector is in position **S8**, that you are using the latest version of the XR25 cassette and the correct access code (**D 67 G02* to access fiche N° 68**).

Check battery voltage (U > 10.5 volts). Recharge the battery if necessary.

Check that the yellow 26 track connector A for the connection unit is correctly connected.

Check that the passenger compartment connection unit is correctly fed:
- earth on track **1** of the white passenger compartment connection unit (BII) connector (C).
- + before ignition feed on track **13** of the yellow 26 track passenger compartment connection unit (BII) connector (A).

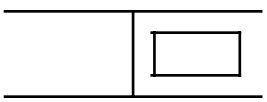
Ensure that the diagnostic socket is correctly fed.

Check and ensure the continuity and insulation of the wiring for tracks **2** and **15** of the yellow 26 track passenger compartment connection unit (BII) connector (A).

There is still no dialogue between the XR25 and the connection unit. Replace the passenger compartment connection unit (BII).

AFTER REPAIR	When communication has been established, deal with any illuminated fault bar-graphs. Carry out a conformity check.

FAULT FINDING - INTERPRETATION OF XR25 BARGRAPHS

3 	**Bargraph 3 RH side illuminated** Fiche n° 68 side 2/3 CODED DIESEL SOLENOID VALVE CONFIGURATION

NOTES	None.

Using the XR25, correctly reconfigure the decoder unit.

On the XR25 keyboard, enter:
- **G22*1*** for a petrol or direct injection diesel vehicle (F9Q),
- **G22*2*** for a diesel vehicle with coded solenoid valve.

NOTE : With the diesel version, incorrect configuration of the passenger compartment connection unit BII will not prevent immobiliser operation. However, if there is a fault, the immobiliser warning light will not illuminate.

AFTER REPAIR	Erase the memorised fault by entering G0** on the XR25. Carry out a conformity check. Check that the engine immobiliser system operates correctly.

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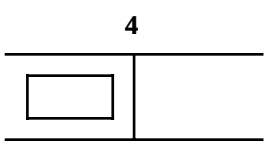
FAULT FINDING - INTERPRETATION OF XR25 BARGRAPHS



Bargraph 4 LH side incorrect illumination

Fiche n° 68 side 2 / 3

+ ACCESSORIES FEED PRESENT

NOTES	Reminder: Under normal operating conditions - BG **4 LH side** illuminated when the ignition switch is in + accessories position - BG **4 LH side** extinguished with the ignition switched off

Check the condition of the + accessories feed fuse.

Replace the fuse if necessary.

Ignition switch in + accessories position, check for the presence of a voltage of + 12 Volts on track **5** of the 26 track yellow passenger compartment connection unit BII connector (B).

Is there 12 Volts ?

YES	Replace the passenger compartment connection unit (BII).
NO	Repair the wiring between track **5** of the 26 track yellow passenger compartment connection unit BII connector (B) and the passenger compartment fuse board.

AFTER REPAIR	Carry out a conformity check. Check that the engine immobiliser system operates correctly.

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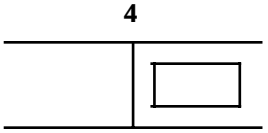
FAULT FINDING - INTERPRETATION OF XR25 BARGRAPHS

	**Bargraph 4 RH side incorrect illumination** Fiche n° 68 side 2 / 3 + AFTER IGNITION FEED PRESENT

NOTES	Reminder: Under normal operating conditions - BG **4 RH side** illuminated when the ignition switch is in + after ignition feed position - BG **4 RH side** extinguished when the ignition switch is in a position other than + after ignition feed position

Check the condition of the + after ignition feed fuse.

Replace the fuse if necessary.

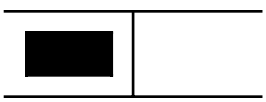
With the ignition switched on, check for a voltage of + 12 Volts on track **17** of the yellow 26 track passenger compartment connection unit (BII) connector (A).

Is there 12 Volts ?

YES	Replace the passenger compartment connection unit (BII).
NO	Repair the wiring between track **17** of the yellow 26 track passenger compartment connection unit (BII) connector (A) and the passenger compartment fuse board.

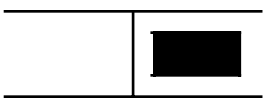
AFTER REPAIR	Carry out a conformity check. Check that the engine immobiliser system operates correctly.

FAULT FINDING - INTERPRETATION OF XR25 BARGRAPHS

5 	**Bargraph 5 LH side** Fiche n° 68 side 2 / 3° ELECTRIC DOOR LOCKING BUTTON
NOTES	Bargraph not active

AFTER REPAIR	Carry out a conformity check. Check that the engine immobiliser system operates correctly.

FAULT FINDING - INTERPRETATION OF XR25 BARGRAPHS

5 	**Bargraph 5 LH side illuminated** Fiche n° 68 side 2 / 3° TAILGATE XR25 aid : * 25 = cc.1 short circuit + 12 volts co.O short circuit to earth or open circuit

NOTES	None

CC.1

NOTES	None

Check the insulation from + 12 volts on the line (BUS) between track 4 of the 26 track yellow passenger compartment connection unit (BII) connector (A) and track 3 of the 4 track tailgate module connector.

Repair the line (BUS) if necessary.

CO.0

NOTES	None

Check the continuity and insulation from earth between track 4 of the 26 track yellow passenger compartment connection unit (BII) connector (A) and track 3 of the 4 track tailgate module connector.

Is there continuity?

YES	Replace the tailgate module.
NO	Repair the line (BUS) between track **4** of the 26 track yellow passenger compartment connection unit (BII) connector (A) and track 3 of the 4 track tailgate module connector.

AFTER REPAIR	Carry out a conformity check. Check that the engine immobiliser system operates correctly.

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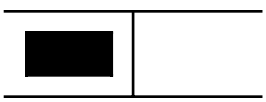
FAULT FINDING - INTERPRETATION OF XR25 BARGRAPHS

6 	**Bargraph 6 LH side illuminated** Fiche n° 68 side 2/3° DIESEL SOLENOID VALVE CLEARANCE

NOTES	**Except for F9Q engines see injection fault finding**

Set the XR25 to pulse detection mode (button "**G**", input using terminal "**Vin**").
Ignition on, check for pulses on track 18 of the 26 track blue passenger compartment connection unit (BII) connector (F) (test with the connection unit and solenoid valve coded electronic unit connectors connected).

Ignition on, if there are no pulses, replace the passenger compartment connection unit (BII).

Switch on the ignition for more than 30 consecutive seconds, then switch off the ignition and wait until the immobiliser warning light flashes (immobiliser active).
Switch on the ignition again and check that bargraph **8 LH side** is permanently illuminated.

Is bargraph **8 LH side** permanently illuminated?

YES	Replace the passenger compartment connection unit (BII).
NO	Replace the solenoid valve coded electronic unit.

AFTER REPAIR	Erase the memorised fault by entering G0** on the XR25. Carry out a conformity check. Check that the engine immobiliser system operates correctly.

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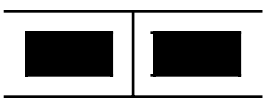
FAULT FINDING - INTERPRETATION OF XR25 BARGRAPHS

6 	**Bargraphs 6 LH side and 6 RH side illuminated** Fiche n° 68 side 2/3° DIESEL SOLENOID VALVE AND CODED LINE CLEARANCE

NOTES	Before beginning fault finding, switch on the ignition for more than 30 consecutive seconds, then switch off the ignition. **For F9Q engines see injection fault finding**

Ensure that the 3 track connector for the solenoid valve coded electronic unit is correctly connected.

Check the condition of the wiring between:

3 track connector for the solenoid valve coded electronic unit:
- 1 and 18 of the 26 track blue passenger compartment connection unit connector F
- 2 and the after ignition feed fuse (see inertia switch)
- 3 and the vehicle earth

Repair the faulty wiring if necessary.

Set the XR25 to pulse detection mode (button "**G**", input using terminal "**Vin**").
With the ignition switched on, check for pulses on track **18** of the 26 track blue passenger compartment connection unit (BII) connector (F) (test with the connectors for the connection unit and the solenoid valve coded electronic unit connected).

Do you note any pulses?

YES	Replace the electronic unit on the solenoid valve side.
NO	Replace the passenger compartment connection unit (BII).

AFTER REPAIR	Erase the memorised fault by entering G0** on the XR25. Carry out a conformity check. Check that the engine immobiliser system operates correctly.

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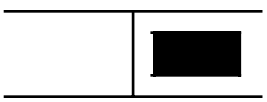
FAULT FINDING - INTERPRETATION OF XR25 BARGRAPHS

6 	**Bargraph 6 RH side illuminated** Fiche n° 68 side 2 / 3 CODED LINE **XR25 aid** : *26 = CO.0 short circuit to earth CC.1 short circuit to + 12 volts

NOTES	None.

Check the continuity and insulation from earth and 12 Volts of the wiring between track **18** of the 26 track passenger compartment connection unit (BII) connector (F) blue and track (*) of the injection computer.

Repair the wiring if necessary.

Set the XR25 to pulse detection mode (button "**G**", input using terminal "**Vin**").
Ignition on, check for pulses on track **18** of the 26 track blue passenger compartment connection unit connector (F) (test with the connectors for the passenger compartment connection unit and the injection computer connected).

Do you note any pulses?

YES	Replace the injection computer.
NO	Replace the passenger compartment connection unit (BII).

(*) On track 35 for F3R engines,
On track 58 for F4R engines.
On track 50 for L7X engines.
On track 59 for F9Q engines.

AFTER REPAIR	Erase the memorised fault by entering GO** on the XR25. Carry out a conformity check. Check that the engine immobiliser system operates correctly.

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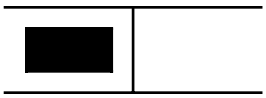
FAULT FINDING - INTERPRETATION OF XR25 BARGRAPHS

7 	**Bargraph 7 LH side illuminated** Fiche n° 68 side 2 / 3° Key interrogation
NOTES	None.

Check the insulation of the line on track 22 of the 26 track yellow passenger compartment connection connector (B) unit and earth or + 12 volts .

Repair the wiring if necessary.

AFTER REPAIR	Erase the memorised fault by entering GO** on the XR25. Carry out a conformity check. Check that the engine immobiliser system operates correctly.

FAULT FINDING - INTERPRETATION OF XR25 BARGRAPHS

7 	Fiche n° 68 side 2 / 3° **Bargraph 7 RH side illuminated** ANTENNA RING / PASSENGER COMPARTMENT CONNECTION UNIT CONNECTION **XR25 aid** : *27 = 1.dEF short circuit to earth 2.dEF open circuit or short circuit to +5 volts / +12 volts

NOTES	None.

Check the continuity and insulation from earth and 12 volts of the wiring between:

Check the continuity of the wiring between tracks :

26 track connection unit connector (B) yellow { 8 and 4 / 22 and 3 / 21 and 6 (earth) / 9 and 1 } antenna ring

Repair if necessary.

Disconnect the 6 track antenna ring connector.
With the ignition switched off, check for a voltage of 12 Volts on track **8** of the 26 track yellow passenger compartment connection unit (BII) connector (B).

If you do not note 12 volts + before ignition feed, replace the passenger compartment connection unit BII.

Reconnect the 6 track antenna ring connector.
With the ignition switched off, check for a voltage of 12 Volts on track **8** of the 26 track yellow passenger compartment connection unit connector (B).

If you do not note 12 volts + before ignition feed, replace the antenna ring.

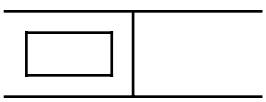
Switch off the ignition and wait until the immobiliser warning light flashes (immobiliser active).
Disconnect the 6 track antenna ring connector.
Set the XR25 to pulse mode (button"**G**", input using terminal "**Vin**").
Switch the ignition on again, check for a pulse on track **9** of the 26 track yellow passenger compartment connection unit connector (B) (test with the connection unit connectors connected).

When the ignition is switched on, is there a pulse?

YES	Replace the antenna ring.
NO	Replace the passenger compartment connection unit BII.

AFTER REPAIR	Erase the memorised fault by entering GO** on the XR25. Carry out a conformity check. Check that the engine immobiliser system operates correctly.

FAULT FINDING - INTERPRETATION OF XR25 BARGRAPHS

11 	Fiche n° 68 side 2 / 3° **Bargraph 11 LH side remains extinguished after pressing the radiofrequency PLIP** RADIOFREQUENCY SIGNAL RECEIVED

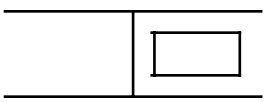
NOTES	If BG **17 RH side** is illuminated, do not apply the fault finding which follows as the BII unit is blank. Carry out the key programming procedure. Only consult the fault finding which follows if BG **11 LH side** remains extinguished after attempting to lock or unlock the vehicle doors using the radiofrequency PLIP.

Check if the vehicle doors can be locked or unlocked by testing with the second key. If the vehicle doors can be locked or unlocked, replace the battery in the first key.

If the vehicle doors cannot be locked or unlocked, replace the instrument panel (the radiofrequency receiver is integrated in the instrument panel).

AFTER REPAIR	Carry out a conformity check. Check that the engine immobiliser system operates correctly.

FAULT FINDING - INTERPRETATION OF XR25 BARGRAPHS

11 	Fiche n° 68 side 2 / 3° **Bargraph 11 RH side remains extinguished after pressing the radiofrequency PLIP** RADIOFREQUENCY SIGNAL CORRECT

NOTES	Only consult the fault finding which follows if BG **11 LH side** illuminates for 3 seconds and BG **11 RH side** remains extinguished when the radiofrequency PLIP is pressed. Check that they are the correct keys for the vehicle.

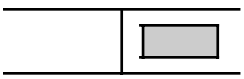
There is desynchronisation between the radiofrequency PLIP code and the passenger compartment connection unit code if bargraph **11 RH side** remains extinguished when the radiofrequency PLIP is pressed (while bargraph **11 LH side** illuminates for approximately 2 seconds before extinguishing) and the vehicle doors cannot be locked or unlocked using the radiofrequency PLIP.

Apply the procedure for resynchronising the keys.

AFTER REPAIR	Carry out a conformity check. Check that the engine immobiliser system operates correctly.

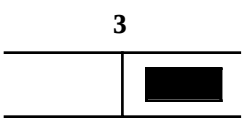
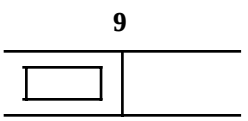
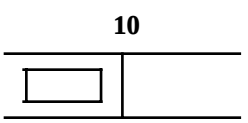
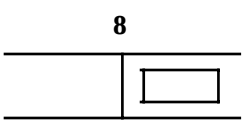
FAULT FINDING - CHECKING CONFORMITY

NOTES	If a fault bargraph illuminates, refer to the corresponding fault chart.

Order of operations	Function to be checked	Action	Bargraph	Display and notes
1	Dialogue with XR25	**D67** **then G02*** (selector on **S8**)		**2 n.68**
2			**1** 	Code present
3	Conformity of decoder unit	**G70***		**X X X** Part Number displayed in 2 sequences
4	Interpretation of normally illuminated bargraphs		**2**  **3** 	**With XR25 cassette n° 18 :** Illuminated if equipped with a timed courtesy light. Extinguished if not equipped with a timed courtesy light. Illuminated for programming with 2 keys. Extinguished if programming with a single key.

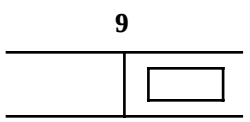
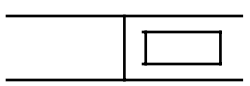
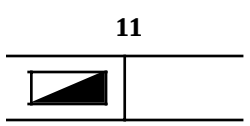
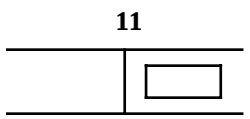
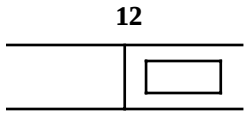
FAULT FINDING - CHECKING CONFORMITY

NOTES	If a fault bargraph illuminates, refer to the corresponding fault chart.

Order of operations	Function to be checked	Action	Bargraph	Display and notes
5	Configuration of computer for Petrol / Diesel			Illuminated if configured for a diesel or petrol vehicle. Command : - **G22*1*** petrol and diesel configuration
6	Forced protection mode			Illuminated only after command **G04*** is entered on the XR25. Vehicle cannot be started as long as BG **9 LH side** is illuminated
7	Immobiliser status			Illuminated if immobiliser is active: switch off the ignition and wait for approximately 10 seconds for BG **10 LH side** to illuminate. Extinguished if immobiliser is inactive
8	Presence of the key			Illuminated when the ignition is switched on (on condition that the vehicle was protected before the ignition was switched on, immobiliser warning light flashing). **NOTE** : In normal operation, bargraphs **8 RH side**, **9 RH side** and **10 RH side** should be illuminated together.

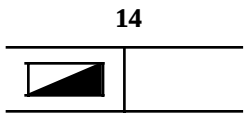
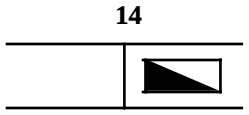
FAULT FINDING - CHECKING CONFORMITY

NOTES	If a fault bargraph illuminates, refer to the corresponding fault chart.

Order of operations	Function to be checked	Action	Bargraph	Display and notes
9	Reception of the key code			Illuminated when the ignition is switched on if the key is coded and has the correct format (on condition that the vehicle was protected before the ignition was switched on, immobiliser warning light flashing). **NOTE** : In normal operation, bargraphs **8 RH**, **9 RH** and **10 RH** should be illuminated together.
10	Valid key code			Illuminated when the ignition is switched on if the key is coded and has the correct format and code (on condition that the vehicle was protected before the ignition was switched on, immobiliser warning light flashing). **NOTE**: In normal operation, bargraphs 8 **RH**, 9 **RH** and 10 **RH** should be illuminated together.
11	Reception of the radiofrequency signal sent by the remote control		 	Illuminated for approximately 3 seconds if the signal is received by the passenger compartment connection unit (BII). Illuminated for approximately 3 seconds if the signal received by the passenger compartment connection unit (BII) is correct.
12	Presence of interior lighting cutout			Should extinguish after 30 minutes with the ignition switched off. Should extinguish after the doors are locked using the PLIP.

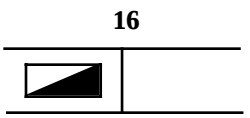
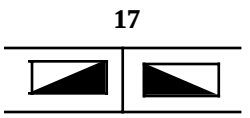
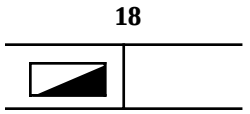
FAULT FINDING - CHECKING CONFORMITY

NOTES	If a fault bargraph illuminates, refer to the corresponding fault chart.

Order of operations	Function to be checked	Action	Bargraph	Display and notes
13	Reception of door lock / unlock information from the central door locking button.			Illuminated when door lock / unlock information is sent by the central door locking button and received. Enter *** 14** on the XR25 to determine the information received by the passenger compartment connection unit (BII): - if *** 14** = 0 door lock information - if *** 14** = 1 door unlock information
14	Sending of door lock / unlock information by the passenger compartment connection unit to the locking micromotors.			Illuminated when door lock / unlock information is sent by the decoder unit to the locking micromotors . Enter *** 34** on the XR25 to determine the information sent by the passenger compartment connection unit (BII): - if *** 34** = 0 door unlock information, - if *** 34** = 1 door lock information.

FAULT FINDING - CHECKING CONFORMITY

NOTES	If a fault bargraph illuminates, refer to the corresponding fault chart.

Order of operations	Function to be checked	Action	Bargraph	Display and notes
15	Reception of door switch information			Illuminated if doors are open
16	Reception of programming in progress or resynchronisation of decoder not carried out information.			17 LH side illuminated if programming or resynchronisation in progress. 17 RH side illuminated if programming not carried out.
17	Reception of programming of 1st key information.			Illuminated if programming of 1st key in progress.

FAULT FINDING - CUSTOMER COMPLAINTS

NOTES	Only consult these customer complaints after a complete check using the XR25.

FAULT FINDING - FAULT CHARTS

Chart 1	NO COMMUNICATION BETWEEN THE XR25 AND THE PASSENGER COMPARTMENT CONNECTION UNIT

NOTES	Use bornier ELE 1506 for the measurements.

Check the condition of the + before ignition feed fuses.
Replace the fuse if necessary.

↓

Ensure that the XR25 is not the cause of the fault by trying to communicate with another computer on the vehicle (air bag computer, injection computer, ...).
Check that the ISO selector is in position **S8**, that you are using the most recent version of the XR25 cassette and the correct access code (**D67**).
Check battery voltage (U > 10.5 volts).
Recharge the battery if necessary.

↓

Check that the 26 track yellow passenger compartment connection unit BII connector (A) is correctly connected.

Check that the passenger compartment connection unit BII is correctly fed:
- earth on track **1** of the white passenger compartment connection unit BII connector (C).
- + before ignition feed on track **13** of the 26 track yellow passenger compartment connection unit BII connector (A).

↓

Ensure that the diagnostic socket is correctly fed.

Check and ensure the continuity and insulation of the wiring for tracks **2** and **15** of the 26 track yellow passenger compartment connection unit BII connector (A).

↓

There is still no dialogue between the XR25 and the passenger compartment connection unit BII. Replace the passenger compartment connection unit BII
See passenger compartment connection unit BII configuration.

AFTER REPAIR	When communication has been established, deal with any illuminated fault bar-graphs. Carry out a conformity check.

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FAULT FINDING - FAULT CHARTS

Chart 2	IGNITION ON, THE IMMOBILISER WARNING LIGHT FLASHES PERMANENTLY (impossible to start the vehicle)

NOTES	Only consult this customer complaint after a complete check using the XR25.

Switch on the ignition.
Connect the XR25.
Use fiche N°68, selector on **S8**.
Enter **D67 then G02***.
Is there communication between the XR25 and the passenger compartment connection unit BII?

no → See **Chart 1**.

yes ↓

Switch on the ignition and check that BG **4 RH side** is illuminated.
Is BG **4 RH side** illuminated?

no → See information on BG **4 RH side** in the "Fault finding - Interpretation of XR25 bargraphs" section.

yes ↓

Switch off the ignition and wait until the immobiliser warning light flashes (immobiliser active).
Switch on the ignition again and check on fiche **N°68** whether BG **7 RH side** is illuminated.
Is BG **7 RH side** illuminated?

yes → See information on BG **7 RH side** in the "Fault finding - Interpretation of XR25 bargraphs" section.

no ↓

Check the key recognition function.
Try to start the vehicle with the 2nd key.
Is it possible to start the vehicle?

yes → Repair or replace the first key.

no ↓

A

AFTER REPAIR	Carry out a conformity check. Check that the engine immobiliser system operates correctly.

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FAULT FINDING - FAULT CHARTS

Chart 2
CONT 1

A

Is the antenna ring correctly mounted on the ignition switch?

no → Refit the antenna ring correctly.

yes

Check the condition of the antenna ring.
Is the antenna ring damaged (coil wires damaged or cut)?

yes → Replace the antenna ring.

no

Check the continuity and insulation from earth and 12 Volts of the wiring between:
26 track connection unit connector (B) yellow and the antenna ring

passenger compartment connection unit BII { 8 and 4 / 22 and 3 / 21 and 6 (earth) / 9 and 1 } antenna ring

Is the wiring in good condition?

no → Repair the faulty wiring.

yes

B

AFTER REPAIR	Carry out a conformity check. Check that the engine immobiliser system operates correctly.

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FAULT FINDING - FAULT CHARTS

Chart 2
CONT 2

B

Switch off the ignition and wait until the immobiliser warning light flashes (immobiliser active).
Disconnect the antenna ring connector.
Set the XR25 to pulse detection mode (button "**G**", input by terminal "**Vin**").
Switch the ignition on again, check for a pulse on track **9** of the 26 track passenger compartment connection unit BII connector (B) (test with the connection unit connectors connected).
Is there a pulse?

no → Replace the passenger compartment connection unit BII.

yes

Switch off the ignition and wait until the immobiliser warning light flashes (immobiliser active).
Switch on the ignition again and check on fiche N°**68** whether BG **8 RH side** illuminates.
Is BG **8 RH side** illuminated?

no → Replace the antenna ring.

yes

Replace the key.

AFTER REPAIR	Carry out a conformity check. Check that the engine immobiliser system operates correctly.

q54561.0

FAULT FINDING - FAULT CHARTS

Chart 3	THE IMMOBILISER WARNING LIGHT REMAINS PERMANENTLY ILLUMINATED (even with the ignition switched off) OR REMAINS PERMANENTLY EXTINGUISHED

NOTES	Only consult this customer complaint after checking on the XR25 that the instrument panel is not faulty.

Check the condition of the + before ignition fuse. Is the fuse in good condition?

no → Replace the fuse.

yes ↓

Check whether bargraph **3 RH side** is extinguished.
Is bargraph **3 RH side** extinguished ?

no → Check the engine configuration.
Use command **#41**

yes ↓

Replace the immobiliser warning light

Additional checks:

 # 41 = engine type

0001 = F3R
0010 = F4R
0011 = L7X
0100 = G8T (VP20)
0101 = G8T (TPPEGR)
0110 = G9T
0111 = F9Q
1000 = LPG (F3R)

AFTER REPAIR	Carry out a conformity check. Check that the engine immobiliser system operates correctly.

q54561.0

FAULT FINDING - FAULT CHARTS

Chart 4	IGNITION ON, THE INJECTION WARNING LIGHT FLASHES PERMANENTLY (impossible to start the vehicle)

NOTES	None

Switch on the ignition.
Connect the XR25.
Use fiche N°68.
Selector on **S8**.
Enter **D67 then G02***.
Is there communication between the XR25 and the connection unit?

no → See **Chart 1**.

yes ↓

Check the continuity and insulation from earth and 12 Volts of the wiring between track **18** of the 26 track blue connection unit connector (F) and track (*) of the injection computer.
Is the wiring in good condition?

no → Repair the wiring.

(*) On track 35 for F3R engines,
On track 58 for F4R engines.
On track 50 for L7X engines.
On track 59 for F9Q engines.

yes ↓

Set the XR25 to pulse detection mode (button "**G**", input on terminal "**Vin**").
Ignition on, check for pulses on track **18** of the 26 track blue connection unit connector (F)
(test with the connectors of the connection unit and the injection computer connected).
Are there pulses?

no → Replace the passenger compartment connection unit BII.

yes ↓

Replace the injection computer.

AFTER REPAIR	Carry out a conformity check. Check that the engine immobiliser system operates correctly.

q54561.0

FAULT FINDING - FAULT CHARTS

Chart 5	WHILE DRIVING (deceleration) AND AT IDLE SPEED, THE INJECTION WARNING LIGHT FLASHES PERMANENTLY

NOTES	Only consult this customer complaint after a complete check using the XR25.

Switch on the ignition.
Connect the XR25.
Use fiche N°68.
Selector on **S8**.
Enter **D67 then G02***.
Is there communication between the XR25 and the connection unit?

no → See **Chart 1**.

yes

XR25 still connected,
on the injection fiches, depending on engine.
check if BG **2 RH side** is illuminated
Is BG **2 RH side** illuminated on the injection fiche?

yes → See the information for BG **2 RH side** on the injection fiche depending on engine in the "Fault finding - Interpretation of XR25 bargraphs" section.

no

XR25 in pulse detection mode,
ignition on, check for a pulse on track 18 of the 26 track blue passenger compartment connection unit connector (F)

Do you note pulses?

no → Replace the passenger compartment connection unit BII.

yes

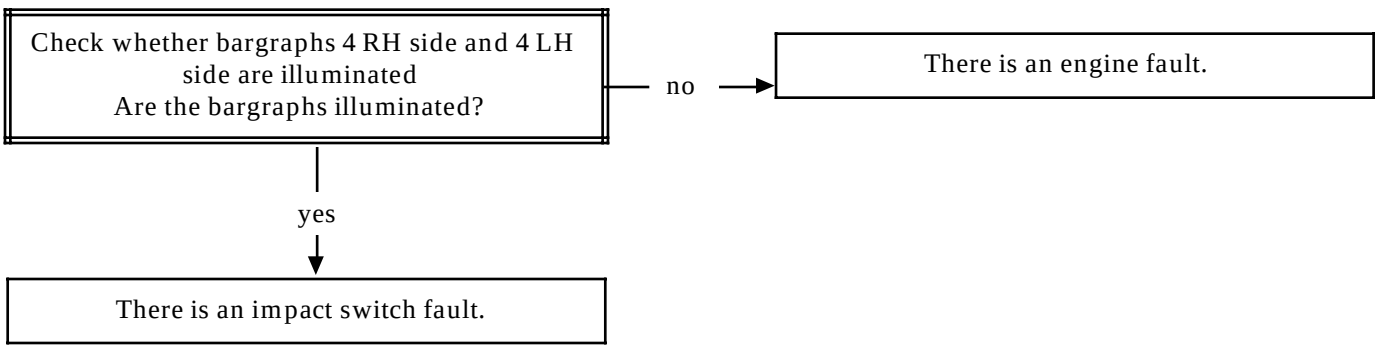
Replace the injection computer

AFTER REPAIR	Carry out a conformity check. Check that the engine immobiliser system operates correctly.

q54561.0

FAULT FINDING - FAULT CHARTS

Chart 6	THE VEHICLE DOES NOT START
NOTES	None



AFTER REPAIR	Carry out a conformity check. Check that the engine immobiliser system operates correctly.

q54561.0

FAULT FINDING - CUSTOMER COMPLAINTS

NOTES	Only consult these customer complaints after a complete check using the XR25.

FAULT FINDING - FAULT CHARTS

Chart 1	IGNITION ON, THE IMMOBILISER WARNING LIGHT FLASHES PERMANENTLY (impossible to start the vehicle)

NOTES	None

Switch on the ignition.
Connect the XR25.
Use fiche **n° 68**, selector on **S8**.
Enter **D67 G02***.
Is there communication between the XR25 and the BII?

no → See **Chart 1** (petrol version).

yes

Switch on the ignition and check whether BG **4 RH side** is illuminated.
Is BG **4 RH side** illuminated?

no → See the information on BG **4 RH side** in the "Fault finding - Interpretation of XR25 bargraphs" section.

yes

Switch off the ignition and wait until the immobiliser warning light flashes (immobiliser active).
Switch on the ignition again and check on fiche n° 68 if BG **7 RH side** is illuminated.
Is BG **7 RH side** illuminated?

yes → See the information on BG **7 RH side** in the "Fault finding - Interpretation of XR25 bargraphs" section.

no

Check the key recognition function.
Try to start the vehicle with the second key.
Is it possible to start the vehicle?

yes → Repair or replace the first key.

no

A

AFTER REPAIR	Carry out a conformity check. Check that the engine immobiliser system operates correctly.

q54561.0

FAULT FINDING - FAULT CHARTS

Chart 1
CONT 1

A

Is the antenna ring correctly mounted on the ignition switch?

no → Refit the antenna ring correctly.

yes

Check the condition of the antenna ring. Is the antenna ring damaged (coil wires damaged or cut)?

yes → Replace the antenna ring.

no

Check the continuity and insulation from earth and 12 Volts of the wiring between:

26 track yellow connection unit connector (B)

- 8 and 4
- 22 and 3
- 21 and 6 (earth)
- 9 and 1

} antenna ring

Is the wiring in good condition?

no → Repair the faulty wiring

yes

B

AFTER REPAIR	Carry out a conformity check. Check that the engine immobiliser system operates correctly.

q54561.0

FAULT FINDING - FAULT CHARTS

Chart 1
CONT 2

B

Switch off the ignition and wait until the immobiliser warning light flashes (immobiliser active).
Disconnect the antenna ring connector.
Set the XR25 to pulse detection mode (button "**G**", input on terminal "**Vin**").
Switch the ignition on again,
check for a pulse on track **9** of the 26 track yellow passenger compartment connection unit connector (B)
(test with the connection unit connectors connected).
Is there a pulse?

no → Replace the connection unit.

yes

Switch off the ignition and wait until the immobiliser warning light flashes (immobiliser active).
Switch on the ignition again and check on fiche n° 68 whether BG **8 RH side** illuminates.
Does BG **8 RH side** illuminate?

yes → Replace the antenna ring.

yes

Replace the key.

AFTER REPAIR	Carry out a conformity check. Check that the engine immobiliser system operates correctly.

q54561.0

FAULT FINDING - FAULT CHARTS

Chart 2	THE IMMOBILISER WARNING LIGHT REMAINS PERMANENTLY ILLUMINATED FOR MORE THAN 30 CONSECUTIVE SECONDS, IGNITION ON (THE IMMOBILISER WARNING LIGHT ILLUMINATES AS SOON AS THE IGNITION IS SWITCHED ON, IN THE 16 SECONDS FOLLOWING SWITCHING ON THE IGNITION OR THE IMMOBILISER WARNING LIGHT ILLUMINATES FOR MORE THAN 30 CONSECUTIVE SECONDS)

NOTES	None

Check the condition of the wiring between:

solenoid valve coded electronic unit connector
- 1 and 18 of the 26 track connection unit connector (F)
- 2 and + after ignition feed fuse (see impact switch)
- 3 and vehicle earth

Is the wiring in good condition?

no → Repair the wiring.

yes ↓

Set the XR25 to pulse detection mode (button "**G**", input on terminal "**Vin**"). Ignition on, check for pulses on track **18** of the 26 track connection unit connector (F)

(test with the connectors for the connection unit and the solenoid valve coded electronic unit connected).
Are there pulses?

no → Replace the passenger compartment connection unit.

yes ↓

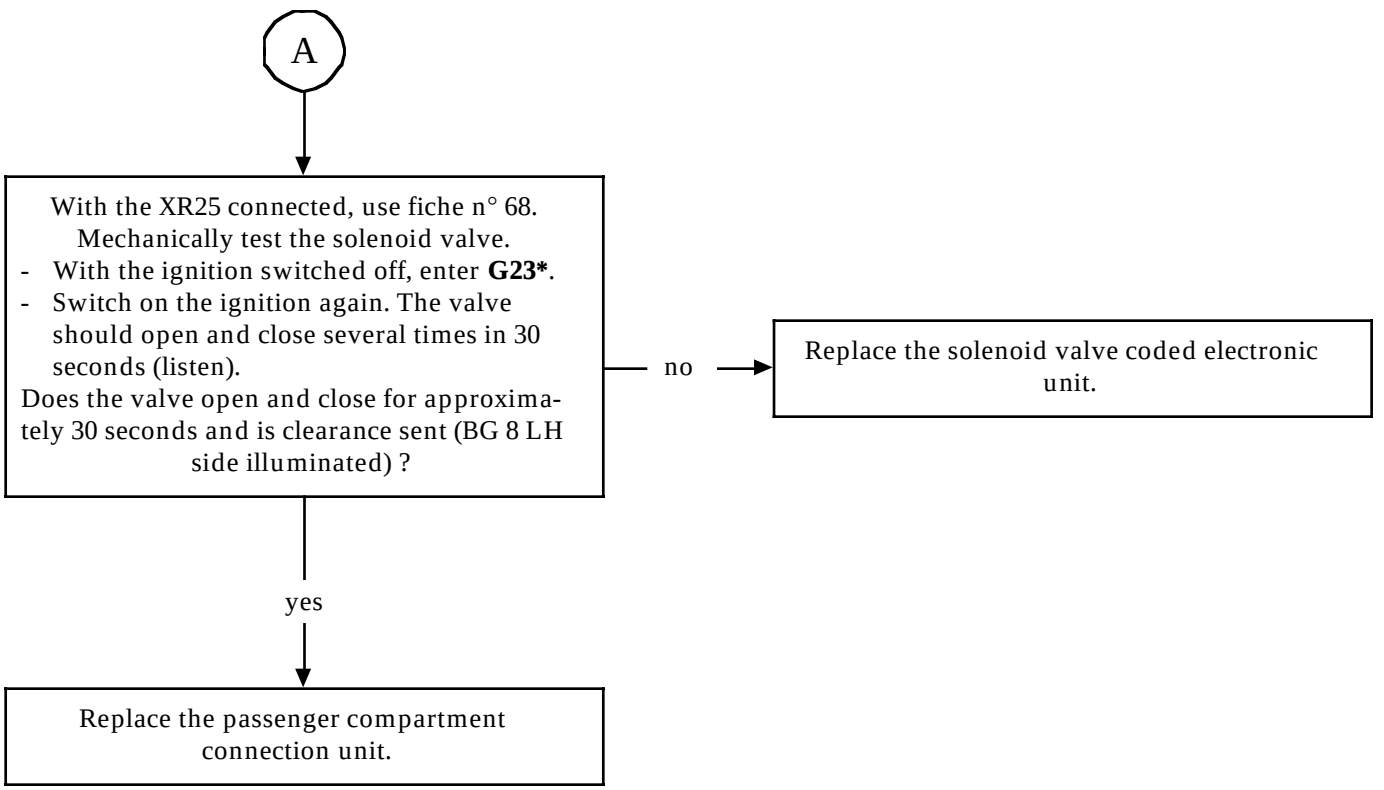
A

AFTER REPAIR	Carry out a conformity check. Check that the engine immobiliser system operates correctly.

q54561.0

FAULT FINDING - FAULT CHARTS

Chart 2 CONT	



AFTER REPAIR	Carry out a conformity check. Check that the engine immobiliser system operates correctly.

q54561.0

FAULT FINDING - FAULT CHARTS

Chart 3	WHEN THE IGNITION IS SWITCHED ON, THE IMMOBILISER WARNING LIGHT ILLUMINATES FOR 3 SECONDS THEN EXTINGUISHES, BUT THE VEHICLE DOES NOT START

NOTES	None

Connect the XR25.
Use fiche n° 68.
Mechanically test the solenoid valve.
- With the ignition switched off, enter **G23***.
- Switch on the ignition again. The valve should open and close several times in 30 seconds (listen).

Does the valve open and close for approximately 30 seconds and is clearance sent (BG **8 LH side** illuminated)?

no →

Remove the solenoid valve coded electronic unit.
Check the condition of the solenoid valve.
With the ignition switched off, connect + 12 Volts
to the solenoid valve.
Then try to start the vehicle.
Does the vehicle start?

yes →

Replace the solenoid valve coded electronic unit.

no →

Replace the solenoid valve.

yes ↓

The solenoid valve coded electronic unit is faulty.
Consult the fault finding corresponding to diesel engines.

AFTER REPAIR	Carry out a conformity check. Check that the engine immobiliser system operates correctly.

FAULT FINDING - FAULT CHARTS

Chart 4	THE IMMOBILISER WARNING LIGHT REMAINS PERMANENTLY ILLUMINATED (even with the ignition switched off) OR REMAINS PERMANENTLY EXTINGUISHED

NOTES	None

Check the condition of the + before ignition fuse. Is the fuse in good condition?

no → Replace the fuse.

yes

Check whether bargraph **3 RH side** is extinguished.
Is bargraph **3 RH side** extinguished?

no → Check the engine configuration.
Use command **#41**

yes

Replace the immobiliser warning light.

Additional checks:

 # 41 = engine type

0001 = F3R
0010 = F4R
0011 = L7X
0100 = G8T (VP20)
0101 =G8T (TPPEGR)
0110 = G9T
0111 = F9Q
1000 = LPG (F3R)

AFTER REPAIR	Carry out a conformity check. Check that the engine immobiliser system operates correctly.

FAULT FINDING - FAULT CHARTS

Chart 5	THE VEHICLE DOES NOT START

NOTES	None

Check whether bargraphs 4 RH side and 4 LH side are illuminated.
Are the bargraphs illuminated?

no → There is an engine or coded solenoid valve fault.

yes ↓

There is an impact switch fault.

AFTER REPAIR	Carry out a conformity check. Check that the engine immobiliser system operates correctly.

ADDITIONAL CHECKS

COMMAND MODES **G--***

To use this function, enter **G** on the XR25, then the number of the command, followed by a star.

04 Forced protection mode: activates the immobiliser function even if the key is correct, which allows starting prevention to be checked. Bargraph **9 LH side** should illuminate.
This command must be entered when the ignition is off and the immobiliser function is active.
IMPORTANT : turning the ignition off cancels this command.

05 Immobiliser warning light command (illuminates the immobiliser warning light for 3 seconds).

08 Door unlock command (activates the micromotors for 3 seconds on unlock side).

09 Door lock command (activates the micromotors for 3 seconds on lock side).

41 Configuration :

41*2*	**F3R engine** = petrol configuration (Bargraph **3 RH side** should be extinguished).
41*3*	**F4R engine** = petrol configuration (Bargraph **3 RH side** should be extinguished).
41*4*	**L7X engine** = petrol configuration (Bargraph **3 RH side** should be extinguished).
41*9*	**LPG F3R engine** = petrol configuration (Bargraph **3 RH side** should be extinguished).
4**1*8***	**F9Q engine** = petrol configuration (Bargraph **3 RH side** should be extinguished).
41*5*	**G8T engine** = diesel configuration (Bargraph **3 RH side** should be illuminated).
41*6*	**G8T TPP EGR engine** = diesel configuration (Bargraph **3 RH side** should be illuminated).

23 Forced solenoid valve test mode (used on diesel vehicles only).
Activates the coded solenoid valve (open / close) for approximately 30 seconds (listen).
NOTE: - the passenger compartment connection unit should be configured for diesel,
- Bargraph **8 LH side** should be illuminated during the test.

31 Configuration :
- **G31 * 1 *** = programming with a single key. This command allows programming to be carried out with a single key when the passenger compartment connection unit alone is being replaced (if the customer does not necessarily have both keys with him).
This command should be entered on the XR25 before beginning the programming procedure.
- **G31 * 2 *** = allows programming with both keys.

40 Entering the security code (Bargraph **10 LH side** should be illuminated and the ignition switched on).
This command mode can be used to enter the security code, but will not allow decoding of the injection computer or the coded solenoid valve.
Enter the vehicle security code number on the XR25 and validate with key "*****".
If the code is correct, "**bon**" is displayed on the XR25 and bargraph **10 LH side** extinguishes.
If the code is not correct, "**deF**" is displayed on the XR25 and bargraph **10 LH side** remains illuminated.

IMPORTANT: 3 attempts may be made to enter the code. If, after the third attempt, the code remains invalid, you must wait for 15 minutes with + after ignition feed before trying again (the ignition must be turned off and on again between each attempt).

7**0** Reading the part number (connection unit part number).

ADDITIONAL CHECKS

LIST OF THE VARIOUS #

11 Type of instrument panel:
E1, E2, E3, PE2

12 Type of passenger compartment connection unit
b1, b2, b3,

26 Source of the last command for the opening elements:
3 → Radiofrequency remote control
2 → Central door locking button

27 Operation of the last command for the opening elements:
1 → Unlock
2 → Lock

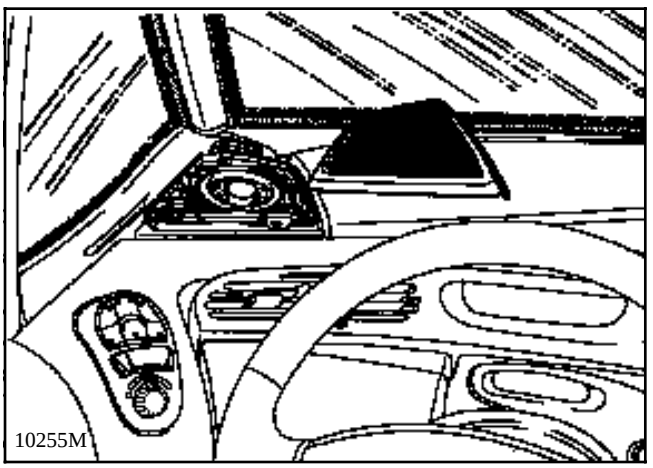
41 engine type:
0001 → F3R
0010 → F4R
0011 → L7X
0100 → G8T (VP20)
0101 → G8T (TPPEGR)
0110 → G9T
0111 → F9Q
1000 → LPG (F3R)

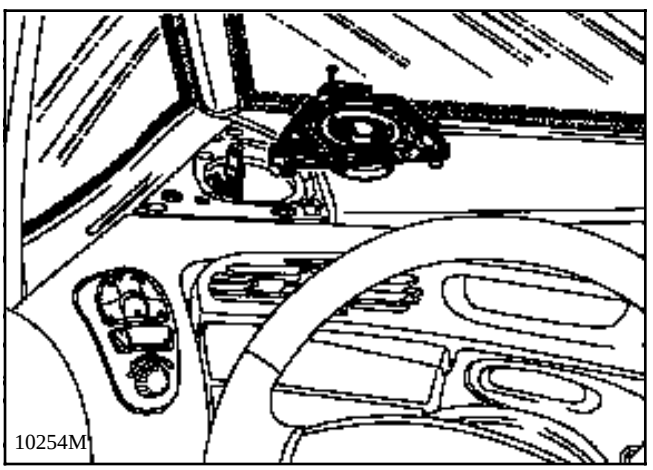
IMPORTANT:

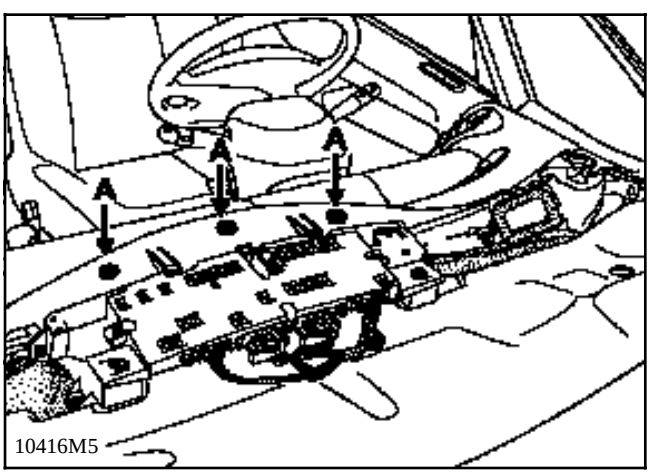
When replacing an instrument panel, the mileage is retained in the memory of the passenger compartment connection unit BII.

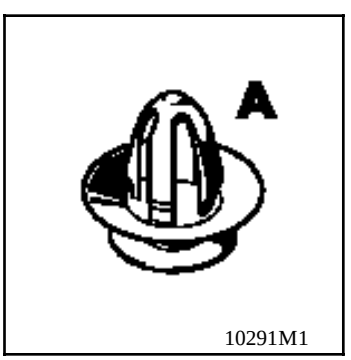
When connecting the new instrument panel the mileage in the memory will be displayed automatically on the instrument panel.

Do not carry out fault finding using a substitute component from another vehicle as the higher mileage will be memorised and will be displayed on both vehicles.









REMOVAL: instrument panel

IMPORTANT: Instrument panels with integrated red immobiliser warning light; before any operation see the fault finding for the passenger compartment connection unit BII.
Connect the XR25 cassette 18.
Fiche 1.n67 and enter the code D67.

OPERATION

Unclip the speaker grilles by hand, without using a tool, starting with the edge on the deflector side.

Unscrew the three mountings of each speaker support.

Disconnect the speakers and remove them.

On V6 automatic transmission vehicles, place the automatic transmission lever in position "**2**".

Lift the dashboard cover starting in the corner and pull vertically to unclip the three mountings (A).

Remove the upper section of the dashboard by pulling it to the rear.

Slacken the five mountings and disconnect the instrument panel.

REFITTING

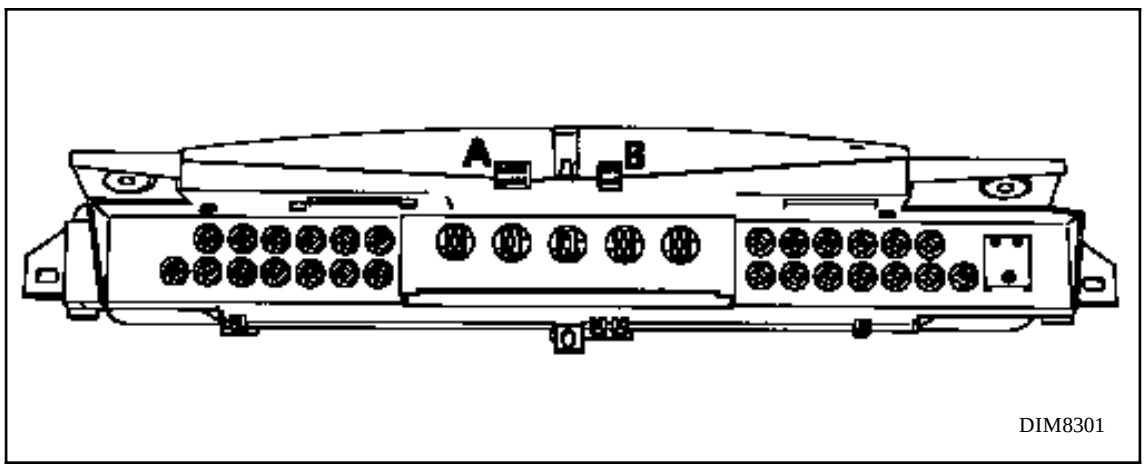
Check for the presence of the three clips (A).

Refitting is the opposite of removal.

Check:
- radio operation,
- radiofrequency PLIP operation.

EQUIPMENT LEVEL E1 ,E2 and E3

CONNECTIONS



12 track blue connector (A)

1 Rheostated lights control

2 +Battery

3 Earth

4 Electronic earth.

5 Diag link line (H)

6 Diag link line (L)

7 Not used.

6 track black connector (B)

1 BIN H radio control

2 BSET radio control

3 BRXEN radio control

4 BDATA radio control

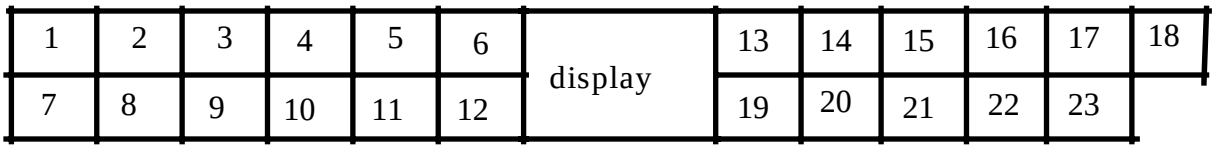
5 BSCK radio control

6 GND radio control

7 Not used

8 Not used

EQUIPMENT LEVEL E1 .



Reference		colour
1	Front fog lights	green
2	Rear fog lights	amber
3	Side lights	green
4	Dipped headlights	green
5	Main beam headlights	blue
6	Left hand indicator	green
7	Catalytic converter overheating	red
8	Battery charge	red
9	Minimum fuel level	red
10	Minimum oil level	red
11	Minimum oil pressure	red
12	Immobiliser warning light	red
13	Right hand indicator	green
14	Nivocode and parking brake	red
15	A.B.S.	red
16	Heated seats	amber
17	Front seat belt warning light	red
18	Self-levelling suspension (C.O.A.)	amber
19	Brake pad wear	amber
20	Electronic fault (injection or AT)	amber
21	Maximum coolant temperature	red
22	Diesel preheating	amber
23	Air bag	amber
.		

EQUIPMENT LEVEL E1 .

DISPLAY:

- Digital display of speed in km / h or MPH
- Digital display of total distance on provision of + after ignition feed
- Display of fuel level in the form of a bargraph
- Display of the stopped engine oil level or coolant temperature.
  (20 seconds after switching on the + after ignition with the
  engine running) in the form of a bargraph.
- Permanent clock display.

EQUIPMENT LEVEL E2 and E3 .

Reference		colour	V.M.F	
			STOP	SERVICE
1	Dipped headlights (codes)	green		
2	Main beam headlights (headlights)	blue		
3	Left hand indicator	green		
4	Side lights	green		
5	Rear fog lights	amber		
6	Front fog lights	green		
7	Immobiliser warning light	red		
8	Right hand indicator	green		
9	Nivocode and parking brake	red	X	
10	A.B.S.	red	X	
11	Self-levelling suspension (C.O.A.)	amber		X
12	Front seat belt warning light	red		
13	Heated seats	amber		

V.M.F.: Multifunction warning light

EQUIPMENT LEVEL E2 and E3 .

Reference		colour	V.M.F.	
			STOP	SERVICE
V.M.F.	Maximum coolant temperature	red	X	
V.M.F.	Catalytic converter overheating (petrol)	red	X	
V.M.F.	Battery charge	red	X	
V.M.F.	Minimum oil pressure	red	X	
V.M.F.	Brake pad wear	amber		X
V.M.F.	Electronic fault (AT+injection)	amber		X
V.M.F.	Fuel low	amber		
V.M.F.	Diesel preheating	amber		
V.M.F.	Minimum oil level	amber		X
V.M.F.	Air bag/pretensioner	amber		X
V.M.F.	Outside temperature and clock (permanent display except message in V.M.F)	amber		
V.M.F.	Radio information	amber		
V.M.F.	When engine stalled	red		
V.M.F.	ABS fault	red	X	
V.M.F.	COA fault	amber		X
V.M.F.	Oil pressure sensor fault	amber		X
V.M.F.	Battery charge fault	amber		X
V.M.F.	Nivocode fault	red	X	

DISPLAY:
- Digital display of speed in Km / h or MPH (depending on country)
- Display of fuel level in the form of a bargraph
- Display of the stopped engine oil level or coolant temperature. (20 seconds after providing the + after ignition feed and with engine running) in the form of a bargraph.
- ADAC zone display:
  - Trip total in kilometres
  - Average speed
  - Average consumption
  - Instantaneous consumption
  - Predicted fuel range
- Radio display
- General constant total display in kilometres.

V.M.F. = Multi-function warning light.

Description of on and standby function for the instrument panel.

When the doors are unlocked using the radiofrequency PLIP, when a door is opened or with + after ignition feed, the passenger compartment connection unit BII becomes active, it then measures the oil level and transmits it to the instrument panel. This takes one minute.

The instrument panel generates the radiofrequency code (TRF) and sends the order to unlock or lock the doors to the passenger compartment connection unit BII.

REMOVAL

Overhauling of the instrument panel is strictly forbidden.

If there is a fault, it must be replaced.

NOTE: When an instrument panel is replaced, it must be configured. Otherwise, speed information will flash as this will not be configured.

Resynchronise the PLIPs (see section 82)

Configuration of the instrument panel is managed by the passenger compartment connection unit BII

Ignition on and engine not running:

- Connect the XR25 to the diagnostic socket equipped with cassette n° 18 and set the selector to S8.
- Enter the code **D** **6** **7**
- The following will appear on the central display:

1.n67

• Configuration depending on drive side and engine

Left hand drive: **G42*1***
Right hand drive: **G42*0***

ENGINE:

F3R	**enter G41*2***
F4R	**enter G41*3***
L7X	**enter G41*4***
G8T	**enter G41*5***
G8T TPP EGR	**enter G41*6***
F9Q	**enter G41*8***
LPG F3R	**enter G41*9***

COOLANT TEMPERATURE:

Indicated on the instrument panel:
enter **G52*1***
Not indicated on the instrument panel:
enter **G52*0***

Check that the doors lock and unlock correctly (if not, see the resynchronisation procedure in section 82)

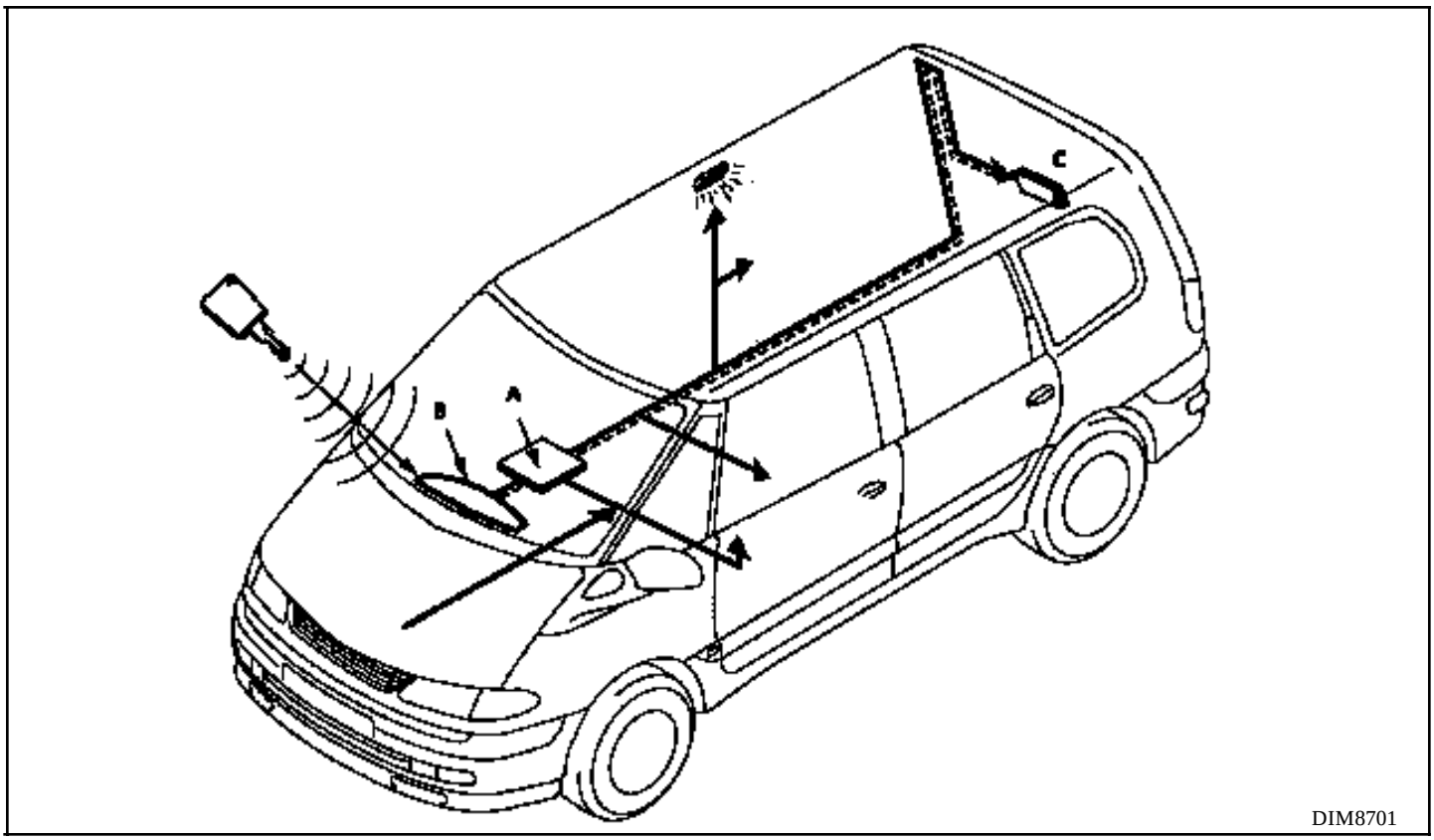
IMPORTANT:

When replacing the instrument panel, the mileage is retained in the memory of the passenger compartment connection unit.

When connecting the instrument panel, the mileage in the memory will be displayed automatically on the instrument panel.

Do not carry out fault finding using a substitute component from another vehicle, as the higher mileage will be memorised and will be displayed on both vehicles.

LOCATION OF COMPONENTS CONNECTED TO THE PASSENGER COMPARTMENT CONNECTION UNIT BII



_ _ _ _ multiplexed connection

A : Passenger compartment connection unit (BII)
B : Instrument panel
C : Tailgate module

GENERAL

The ESPACE is equipped with a passenger compartment connection unit (BII) allowing management of:

- The immobiliser by means of a key recognition system (known as the **CODED KEY** immobiliser system).
- Door locking and unlocking by means of a radiofrequency PLIP (TRF).
- Interior lighting.
- Warning light signals on the instrument panel
- Information from the engine sensors.
- Driver's electric window.
- Windscreen wipers.
- Indicators and hazard warning lights.

A tailgate module unit which manages:

- Illumination of the rear fog lights.
- Rear wipers.
- Number plate lights.
- Rear screen switch (if the screen can be opened).
- 3rd line and luggage compartment lighting.

OPERATING PRINCIPLE

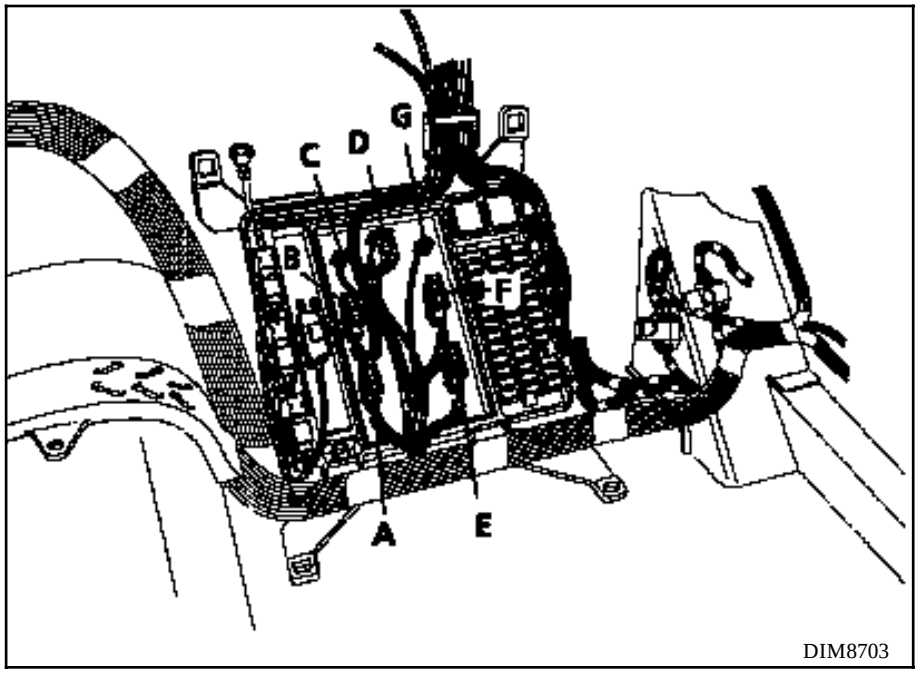
The passenger compartment connection unit BII communicates with the instrument panel via 2 wires, diag link line L and diag link line H. The instrument panel receives this information and illuminates the warning lights concerned.

The passenger compartment connection unit BII communicates with the tailgate module unit via a line which transmits the information.

Description of standby and on functions of the passenger compartment connection unit.

When the doors are unlocked using the radiofrequency PLIP, a door is opened or with + after ignition feed the passenger compartment connection unit BII becomes active, it measures the oil level and sends it to the instrument panel. This takes one minute.

PASSENGER COMPARTMENT CONNECTION UNIT BII CONNECTIONS



26 TRACK YELLOW CONNECTOR (A)

Track	Allocation
1	Reverse
2	Diagnostic information (line L)
3	0 volt outside temperature sensor
4	Tailgate module / connection unit connection
5	+ protected accessories feed
6	- EC5 air bag fault warning light
7	+ left hand side lights
8	+ rear screen washer pump
9	- rear left and right door switch
10	- driver's electric window one touch raise control
11	- driver's electric window normal raise control
12	- 1st line courtesy light
13	+ 12 V before ignition feed to passenger compartment connection unit
14	- SDM air bag fault warning light
15	Diagnostic information (line K)
16	Outside temperature sensor information.
17	+ after ignition feed windscreen wiper
18	- front left hand door switch
19	+ main beam headlights
20	+ windscreen washer pump
21	+ dipped headlights
22	- seat belt information
23	- front right hand door switch
24	driver's electric window normal lowering control
25	- handbrake information
26	- rear electric window blocking control

26 TRACK YELLOW CONNECTOR (B)

Track	Allocation
1	+ instrument panel rheostat
2	+ air conditioning rheostat
3	- right hand indicator control via stalk
4	- hazard warning lights timed / control information
5	central door locking button opening control
6	- fast speed windscreen wiper control via stalk information
7	- timed rear wiper start information
8	antenna ring / connection unit coded line
9	+ antenna ring feed
10	+ rheostat information (knob)
11	+ front fog lights relay
12	+ rear screen wiper timer
13	Diag link line H instrument panel information
14	- interior lighting via switch
15	- passenger compartment lighting via relay
16	- control panel A / C relay
17	- left hand indicator control
18	central door locking button close control
19	- ADAC sequence
20	- slow speed windscreen wiper information
21	Antenna ring earth
22	Antenna ring interrogation
23	0 volt rheostat potentiometer
24	+ rear fog lights control
25	+ 12 V instrument panel protected before ignition feed via passenger compartment connection unit
26	Diag link line L instrument panel information

1 TRACK WHITE CONNECTOR (C)

Track	Allocation
1	Earth

16 TRACK BLACK CONNECTOR (D)

Track	Allocation
1	Right hand indicator output
2	Left hand indicator output
3	Driver's electric window raise
4	Driver's electric window lower
5	Not used
6	+ central door locking button close
7	+ central door locking button open
8	+ fast speed windscreen wiper
9	+ windscreen wiper
10	+ front fog lights via relay
11	+ front fog lights
12	- passenger compartment lighting via relay
13	+ air conditioning authorisation via pressostat
14	- rear right hand side electric window authorisation
15	- rear left hand side electric window authorisation
16	+ slow speed windscreen wiper

12 TRACK BLUE CONNECTOR (E)

Track	Allocation
1	- automatic transmission fault warning light
2	Not used
3	- door open output
4	LPG level information
5	LPG fuel selection information
6	Not used
7	- self-levelling suspension fault warning light
8	Not used
9	Not used
10	Not used
11	Fuel flow information
12	- heated seat warning light

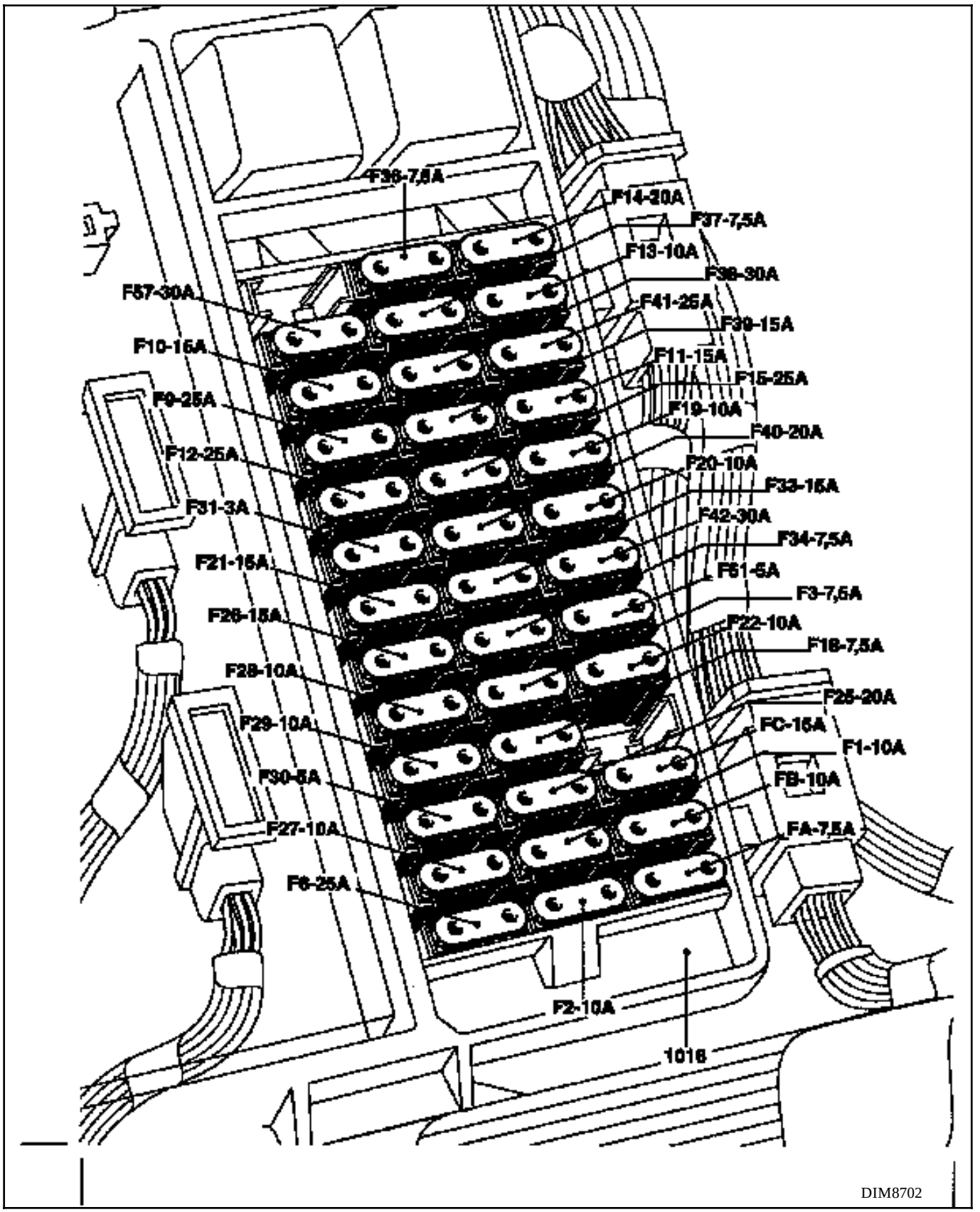
26 TRACK BLUE CONNECTOR (F)

Track	Allocation
1	Coolant temperature information
2	Fuel level information
3	Oil level sensor information
4	TDC information
5	Headlight washer control
6	+ alarm close information
7	+ motor 1 fan assembly battery
8	- brake fluid level information
9	- brake pad wear warning light
10	Not used
11	Not used
12	- charge warning light
13	- ABS warning light
14	Not used
15	0 volt fuel gauge
16	0 volt oil level
17	Secondary fan speed information
18	Injection / diesel coded information
19	+ alarm open information
20	+ motor 2 fan assembly
21	- injection fault warning light
22	- oil pressure warning light
23	- catalytic converter overheating warning light
24	- preheating warning light
25	- windscreen wiper park
26	- coolant temperature warning light

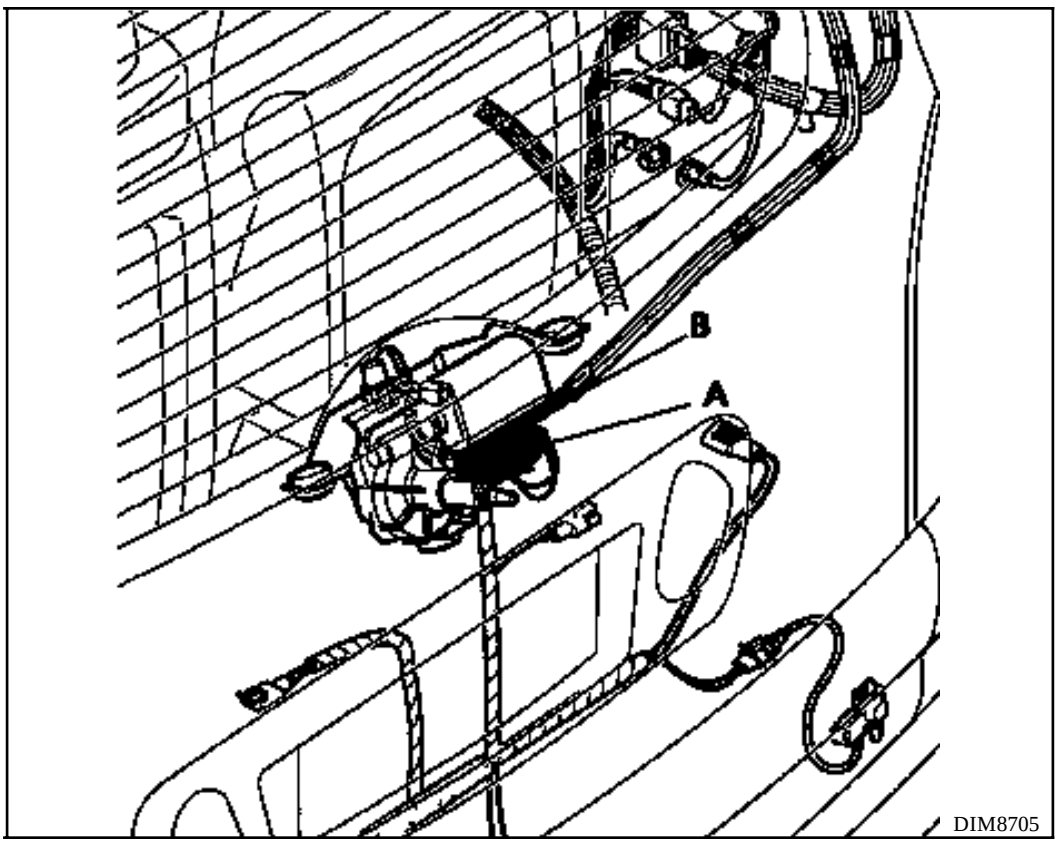
1 TRACK GREY CONNECTOR (G)

Track	Allocation
1	+ battery

FUSE BOX (See wiring diagrams NT 8141A)



TAILGATE MODULE



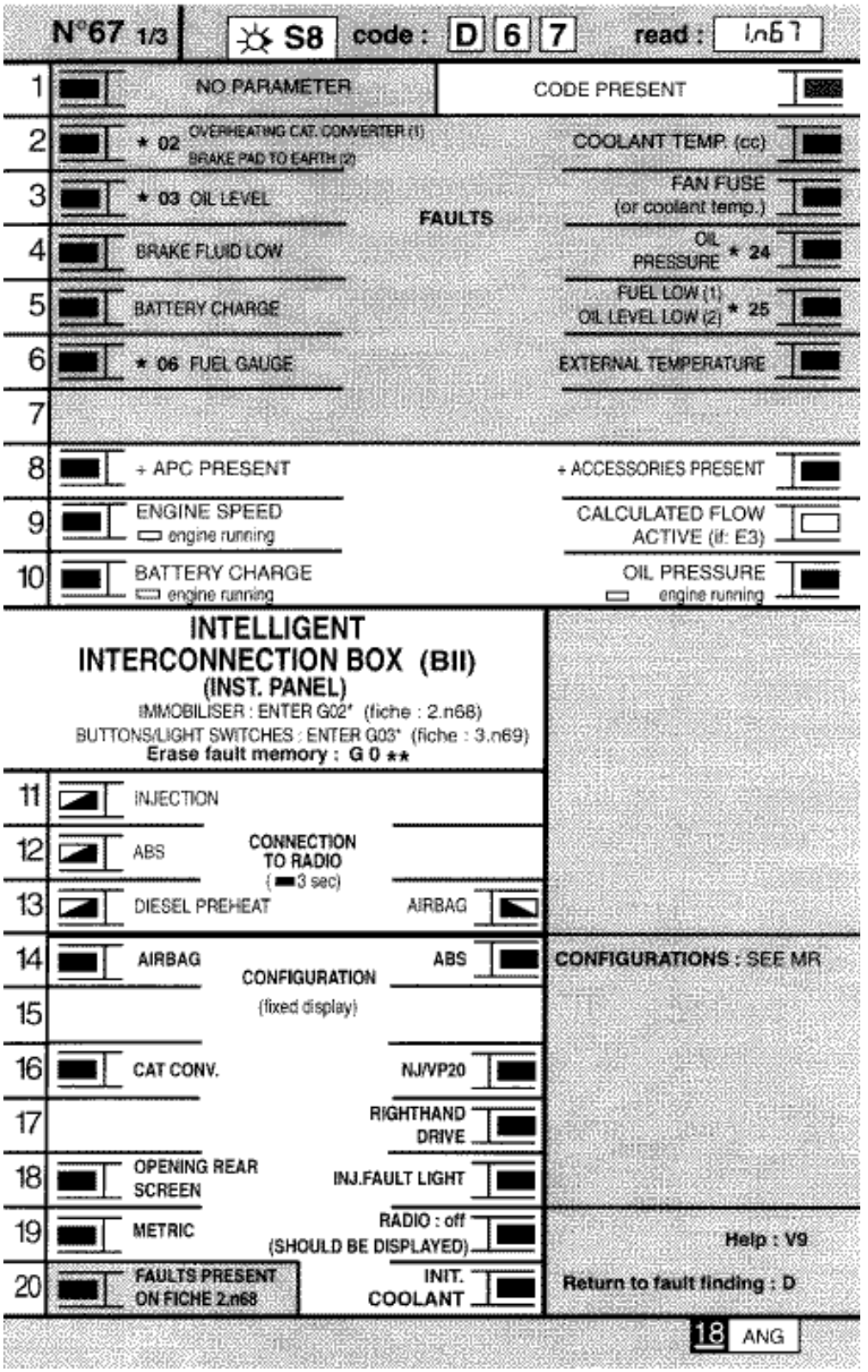
4 track black connector (A)

Track	Allocation
1	Earth
2	+ 12 volts protected before ignition feed
3	Line connection to the passenger compartment connection unit BII
4	- 3rd line courtesy light / tailgate and luggage compartment lighting via tailgate module

18 track black connector (B)

Track	Allocation
1	Not used
2	Tailgate motor open
3	Opening rear screen switch
4	Rear screen switch earth via tailgate module
5	+ right hand number plate feed
6	tailgate motor close
7	+ rear right hand fog lights control
8	+ rear left hand fog lights control
9	- rear right hand fog lights control
10	Not used
11	Screen motor opening
12	Right and left hand tailgate switches
13	Right and left hand tailgate earth via tailgate module
14	+ left hand number plate feed
15	Screen motor closing
16	- rear left hand fog lights control
17	Right hand number plate earth control
18	Left hand number plate earth control

XR25 fault finding fiche
fiche N°67



FI21867

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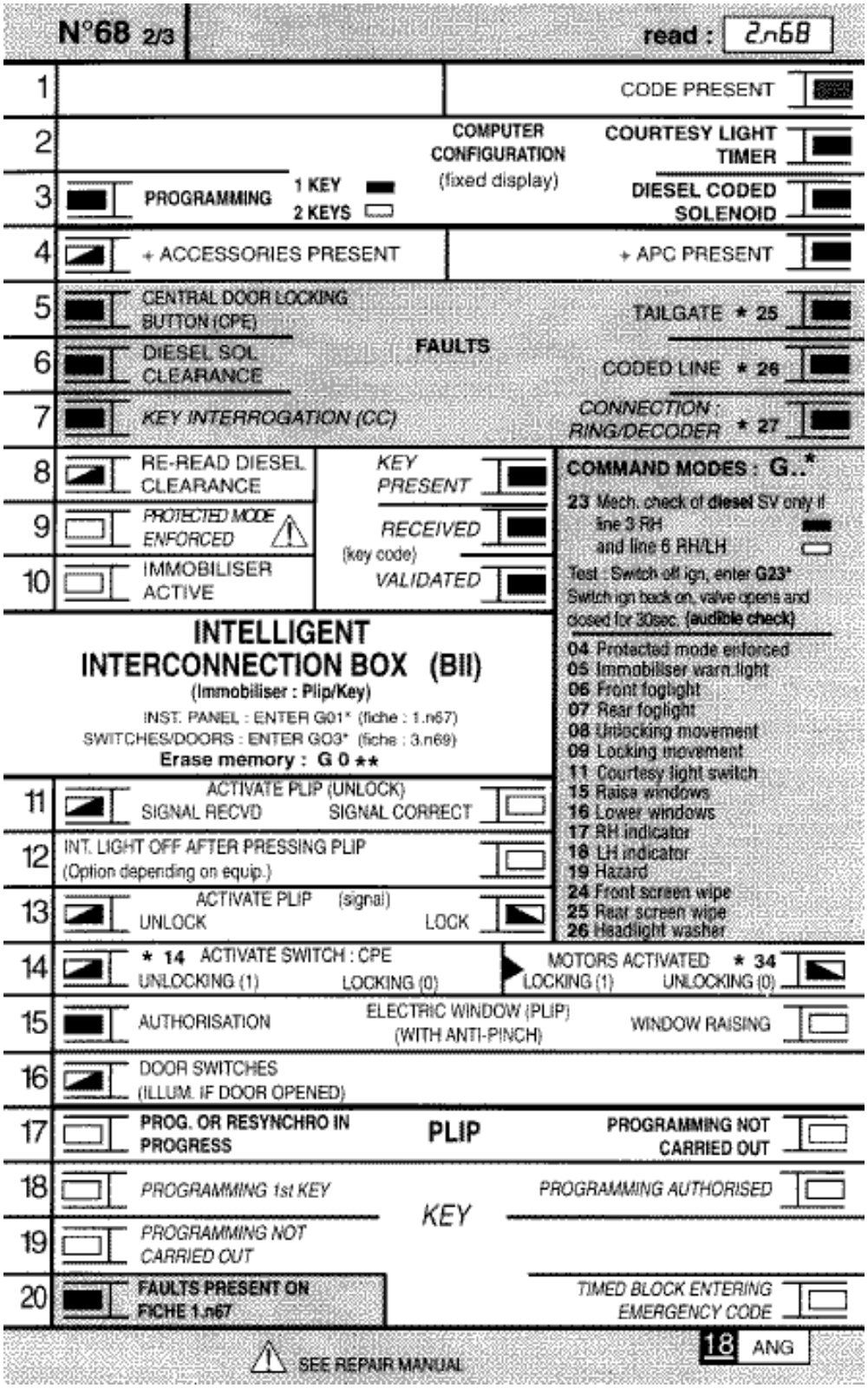
XR25 fault finding fiche
fiche N°.68



FI21868

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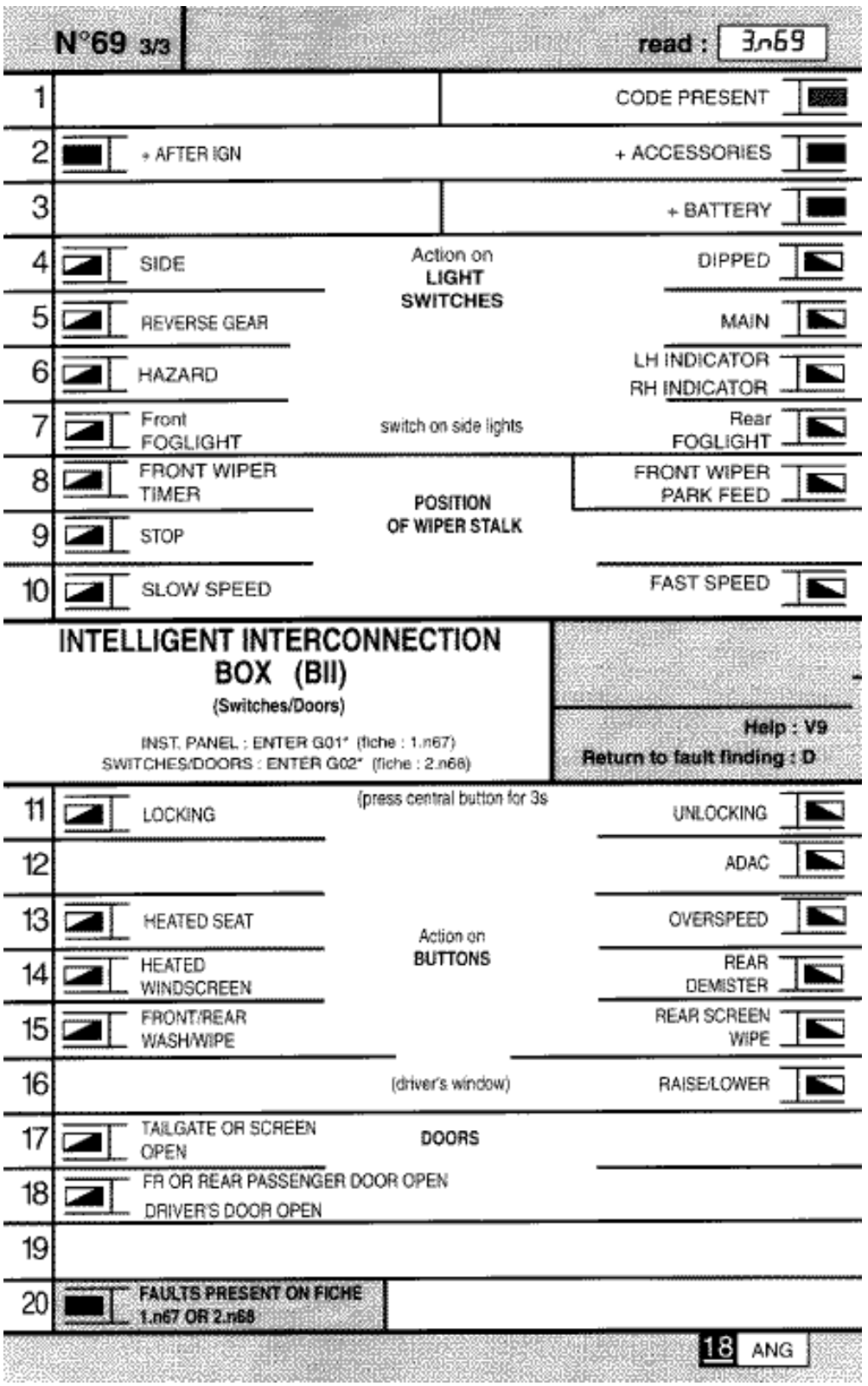
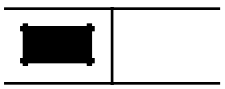
XR25 fault finding fiche
fiche N°.69



FI21869

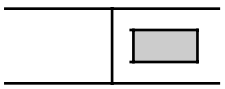
BARGRAPH SYMBOLS

- for faults (always on a coloured background):



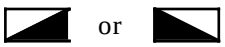
If illuminated, indicates a fault on the product tested. The associated text defines the fault.
This bargraph may be:
- Illuminated : fault present.
- Flashing : fault memorised.
- Extinguished : fault absent or not detected.

- for status (always on a white background:



Bargraph always on the top right hand side.
If illuminated, indicates that dialogue is established with the product computer.
If it remains extinguished :
- The code does not exist.
- There is an XR25, computer or **XR25** / computer connection fault.

The representation of the following bargraphs indicates their initial status:
Initial status: (ignition on, engine stopped, no operator action).

 or Indefinite

 Extinguished

is illuminated when the function or condition specified on the fiche is being met.

 Illuminated

when the function or the condition specified on the fiche is no longer being met.

- Additional details:

Certain bargraphs have a *. The command*.., when the bargraph is illuminated, allowing additional information on the type of fault or status to be displayed.

1	Fiche n° 67 side 1/3° **Bargraph 1 RH side extinguished** **Code present**

NOTES	Use bornier ELé 1506 to make the measurements.

Check the condition of the + before ignition feed fuse.

Replace the fuse if necessary.

Ensure that the XR25 is not the cause of the fault by trying to communicate with another computer on the vehicle (air bag computer, injection computer, ...).

Check that the ISO selector is in position **S8**, that you are using the latest version of the XR25 cassette and the correct access code (**D 67**).

Check battery voltage (U > 10.5 volts). Recharge the battery if necessary.

Check that the 26 track yellow passenger compartment connection unit BII connector (A) is correctly connected.

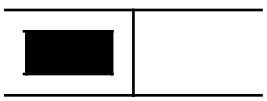
Check that the passenger compartment connection unit BII is correctly fed:
- earth on track **1** of the 1 track white passenger compartment connection unit BII connector (C).
- + before ignition feed on track **13** of the 26 track yellow passenger compartment connection unit BII connector (A).

Ensure that the diagnostic socket is correctly fed.

Check and ensure the continuity and insulation of the wiring for tracks **2** and **15** of the 26 track yellow passenger compartment connection unit BII connector (A).

There is still no dialogue between the XR25 and the passenger compartment connection unit BII. Replace the passenger compartment connection unit BII
See configuration of the passenger compartment connection unit BII.

AFTER REPAIR	When communication has been established, deal with any illuminated fault bargraphs.

1 	Fiche n° 67 side 1/3° **Bargraph 1 LH side illuminated** **Configuration of the passenger compartment connection unit BII**

NOTES	This bargraph should be extinguished for fault finding.

CONFIGURATION :

G_ _*

42*1*	**left hand drive**
42*0*	**right hand drive**
41*2*	**F3R engine**
41*3*	**F4R engine**
41*4*	**L7X engine**
41*5*	**G8T engine**
41*6*	**G8T TPP EGR engine**
41*8*	**F9Q engine**
41*9*	**LPG F3R engine**
44*1*	**fixed rear screen**
44*0*	**opening rear screen**
47*1*	**courtesy lights timing**
47*0*	**without courtesy lights timing**
57*1*	**with catalytic converter**
57*0*	**without catalytic converter**
58*1*	**with ADAC**
58*0*	**without ADAC**
59*1*	**with ABS**
59*0*	**without ABS**
61*1*	**injection or VP20 present (VP20 = depollution on G8T engines for Austria, etc.)**
61*0*	**injection or VP20 absent**
51*1*	**MIL (pollution warning light) present if F4R euro 2000 engine**
51*0*	**MIL (pollution warning light) absent**
52*1*	**coolant temperature indicated**
52*0*	**coolant temperature not indicated**
53*1*	**0V after radiofrequency PLIP**

Additional checks:

#_ _

11 = type of instrument panel

41 = type of engine

- **0001 = F3R**
- **0010 = F4R**
- **0011 = L7X**
- **0100 = G8T (VP20)**
- **0101 = G8T (TPPEGR)**
- **0110 = G9T**
- **0111 = F9Q**
- **1000 = LPG (F3R)**

AFTER REPAIR	After configuring the passenger compartment connection unit BII, enter GO**. Check the fault bargraphs

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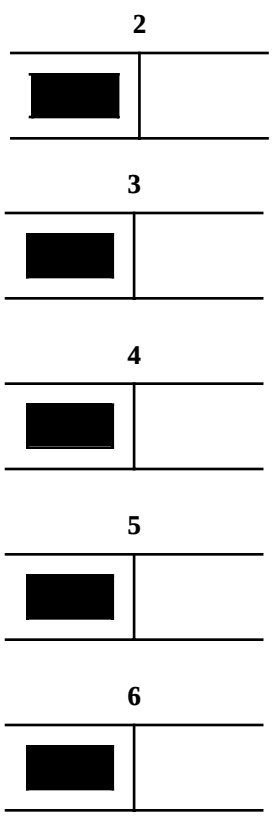

Bargraphs 2,3,4,5 and 6 LH side flashing

XR25 aid: connection problem between the passenger compartment connection unit (BII) and the instrument panel.

IMPORTANT:

When replacing a passenger compartment connection unit BII, the mileage is retained in the instrument panel memory.

When connecting the new passenger compartment connection unit BII, the mileage in the memory will be displayed automatically on the new component.

Do not carry out fault finding using a substitute component from another vehicle, as the higher mileage will be memorised and will be displayed on both vehicles.

NOTES	Use bornier ELé 1506 to make the measurements. Important: both diag link line H and diag link line L lines must be faulty at the same time or the instrument panel is faulty

Check the continuity between track 13 of the 26 track yellow passenger compartment connection unit connector (B) and track 5 of the 12 track instrument panel connector.
Check the continuity between track 26 of the 26 track yellow passenger compartment connection unit connector (B) and track 6 of the 12 track instrument panel connector.

Is there continuity?

YES	Replace the instrument panel.
NO	Repair the diag link line L and diag link line H lines of tracks 13 and 26 of the 26 track yellow passenger compartment connection unit (BII) connector (B) and the instrument panel on tracks 5 and 6.

AFTER REPAIR	The speedometer should no longer flash. See section 83 for configuration of the instrument panel.

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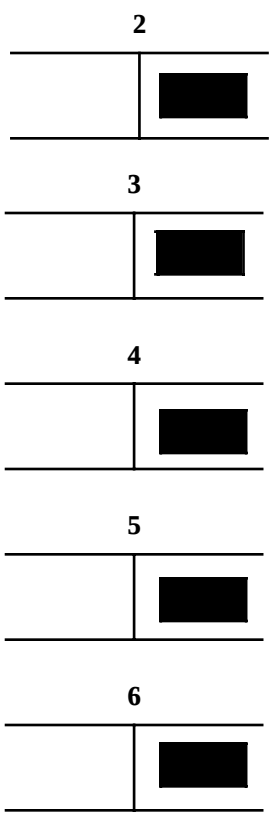


Fiche n° 67 side 1/3°

Bargraphs 2,3,4,5 and 6 RH side flashing

XR25 aid: connection problem between the passenger compartment connection unit (BII) and the tailgate module.

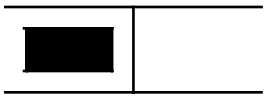
NOTES	Use bornier ELé 1506 to make the measurements.

Check the continuity and insulation from earth between track 4 of the 26 track yellow passenger compartment connection unit connector (A) and track 3 of the 4 track tailgate module connector.

Is there continuity?

YES	Replace the tailgate module.
NO	Repair the wiring for track 4 of the 26 track yellow passenger compartment connection unit (BII) connector (A) and the tailgate module on track 3 of the black 4 track connector.

AFTER REPAIR	Erase the computer memory by entering GO**.

2 	Fiche n° 67 side 1 / 3° **Bargraph 2 LH side illuminated** **Catalytic converter overheating/Brake pad** XR25 aid: *02= 1def catalytic converter overheating *02 = 2 def brake pad to earth

NOTES	Use bornier ELé 1506 to make the measurements.

1.DEF

NOTES	None.

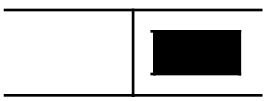
Disconnect the 26 track blue passenger compartment connection unit connector (F).
Check the insulation between track 23 of the 26 track blue connector (F) and earth.
Repair if necessary.

2.DEF

NOTES	None.

Disconnect the 26 track blue passenger compartment connection unit connector (F).
Check the insulation between track 9 of the 26 track blue connector (F) and earth.
Check the condition of the brake pad wear sensors.
Repair if necessary.

AFTER REPAIR	Erase the computer memory by entering GO**.

2 	**Bargraph 2 RH side illuminated** **Coolant temperature**	Fiche n° 67 side 1/3°

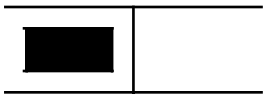
NOTES	None.

Check the resistance value of the sensor by taking the sensor measurement between track 1 and 2:

At 40° = 1250Ω±100Ω

At 80° = 277Ω±15Ω

AFTER REPAIR	Erase the computer memory by entering GO**.

3 	**Bargraph 3 LH side** **Oil level** **XR25 aid: *03 CO : open circuit** **CC : short circuit**	Fiche n° 67 side 1/3°

NOTES	Important: timed control.

CO	***NOTES***	Use bornier ELé 1506 to make the measurements.

Disconnect the 26 track blue connector (F) in the passenger compartment connection unit. Check the resistance value of the sensor between tracks 3 and 16. It should be between 10 and 15 ohms.

Repair if necessary.

CC	***NOTES***	Use bornier ELé 1506 to make the measurements.

Check the insulation and that there is no continuity between tracks 3 and 16, of the 26 track blue connector (F) in the passenger compartment connection unit.

Repair if necessary.

AFTER REPAIR	Erase the computer memory by entering GO**.

3	**Bargraph 3 RH side illuminated** **Fan assembly fuse or coolant temperature**	Fiche n° 67 side 1/3°

NOTES	None.

Fan assembly fuse

NOTES	None.

Check fuses **F54** and **F55** in the engine compartment connection unit.

Check the thermostat, then using the corresponding engine fiche, check the temperature at which the fan assembly begins to operate.

Repair if necessary.

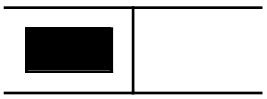
Coolant temperature

NOTES	Use bornier ELé 1506 to make the measurements.

Check the insulation between track 26 and track 1 of the 26 track blue passenger compartment connection unit connector (F).

Repair if necessary.

AFTER REPAIR	Erase the computer memory by entering GO**.

4 	**Bargraph 4 LH side illuminated** **Brake fluid**	Fiche n° 67 side 1 / 3°

NOTES	Use bornier ELé 1506 to make the measurements.

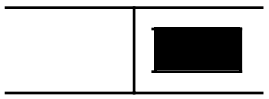
Check the brake fluid level.

Disconnect the 26 track blue connector (F) in the passenger compartment connection unit.

Check the insulation between track 8 and earth.

Repair if necessary.

AFTER REPAIR	Erase the computer memory by entering GO**.

4 	**Bargraph 4 RH side illuminated** **Oil pressure** **XR25 aid: *24 : CCO : short circuit to earth** **CC1 : open circuit or to + 12v**	Fiche n° 67 side 1/3°

NOTES	If 9 LG side illuminated, check the speed circuit.

CC.O	***NOTES***	Use bornier ELé 1506 to make the measurements.

Check the insulation of the line on track 22 and earth, of the 26 track blue connector (F) in the passenger compartment connection unit.

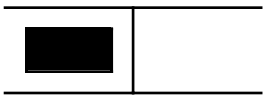
Repair if necessary.

CC.1	***NOTES***	Use bornier ELé 1506 to make the measurements.

Check the continuity between track 22 and earth of the 26 track blue connector (F) in the passenger compartment connection unit .

Repair if necessary.

AFTER REPAIR	Erase the computer memory by entering GO**.

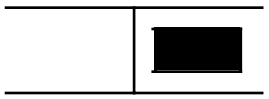
5 	**Bargraph 5 LH side illuminated** **Charging circuit**	Fiche n° 67 side 1 / 3°

NOTES	Use bornier ELé 1506 to make the measurements.

Check the insulation of the line on track 12 and earth of the 26 track blue connector (F) in the passenger compartment connection unit.

Repair if necessary.

AFTER REPAIR	Erase the computer memory by entering GO**.

5 	**Bargraph 5 RH side illuminated** **Fuel level and oil level low** **XR25 aid : *25 : 1 dEF : fuel low** **: 2 dEF : oil low** **: 3 dEF : 1.dEF + 2 dEF**

Fiche n° 67 side 1 / 3°

NOTES	If 3 LH side is illuminated, deal with 3 LH side first.

1.dEF

NOTES	Use bornier ELé 1506 to make the measurements.

Check that the resistance value is between 377Ω and 406Ω by taking the measurement between tracks 15 and 2, of the 26 track blue connector (F) in the passenger compartment connection unit.

Repair if necessary.

2.dEF

NOTES	Use bornier ELé 1506 to make the measurements.

Check the level using the dipstick, the resistance value is between 7Ω and 15Ω between tracks 3 and 16 of the 26 track blue connector (F) in the passenger compartment connection unit.

Repair if necessary.

3.dEF

NOTES	None.

Consult 1.dEF, then 2.dEF .

AFTER REPAIR	Erase the computer memory by entering GO**.

6	**Bargraph 6 LH side illuminated** Fiche n° 67 side 1/3° **Fuel gauge** **XR25 aid: *06 : CO open circuit gauge** **1 dEF : gauge blocked** **2 dEF : CO + 1 dEF**

NOTES	None.

CO	***NOTES***	Use bornier ELé 1506 to make the measurements.

Check the continuity of the line by measuring between tracks 15 and 2 of the 26 track blue connector(F) in the passenger compartment connection unit (BII).

Repair if necessary.

1.dEF	***NOTES***	None.

See the section on the removing the gauge and check its operation.

Repair if necessary.

3.dEF	***NOTES***	None.

Consult CO, then 1.dEF .

AFTER REPAIR	Erase the computer memory by entering GO**.

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6 	**Bargraph 6 RH side illuminated** **Outside temperature**	Fiche n° 67 side 1 / 3°

NOTES	Use bornier ELé 1506 to make the measurements.

Check the continuity and insulation between track 16 and 3 on the 26 track yellow passenger compartment connection unit (BII) connector (A).

Repair if necessary.

AFTER REPAIR	Erase the computer memory by entering GO**.

8	**Bargraph 8 LH side extinguished, ignition on** **Presence of + after ignition feed** **XR25 aid: Illuminated if + after ignition feed**	Fiche n° 67 side 1/3°

NOTES	Use bornier ELé 1506 to make the measurements.

Check the condition of the + after ignition feed (F15) fuse.

Replace the fuse if necessary.

Ignition on, check for a voltage of + 12 Volts on track 17 of the 26 track yellow passenger compartment connection unit (BII) connector (A).

Is there 12 volts?

YES	Replace the passenger compartment connection unit (BII).

NO	Repair the wiring between track 17 of the 26 track yellow passenger compartment connection unit (BII) connector (A) and the passenger compartment fuse board.

AFTER REPAIR	Erase the computer memory by entering GO**. If the passenger compartment connection unit has been replaced remember to configure it (see beginning of this section).

8	**Bargraph 8 RH side extinguished** **Presence of + accessories feed** **XR25 aid: Illuminated if + accessories feed**	Fiche n° 67 side 1 / 3°

NOTES	Use bornier ELé 1506 to make the measurements.

Check the condition of the + accessories feed (F33) fuse.

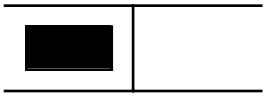
Replace the fuse if necessary.

Ignition on, check for a voltage of + 12 Volts on track 5 of the 26 track yellow passenger compartment connection unit (BII) connector (A).

Is there 12 volts?

YES	Replace the passenger compartment connection unit (BII).
NO	Repair the wiring between track 5 of the 26 track yellow passenger compartment connection unit (BII) connector (A) and the passenger compartment fuse board.

AFTER REPAIR	Erase the computer memory by entering GO**. If the passenger compartment connection unit has been replaced remember to configure it (see beginning of this section).

9 	**Bargraph 9 LH side extinguished, engine running Engine speed**	Fiche n° 67 side 1/3°

NOTES	Use bornier ELé 1506 to make the measurements.

If the bargraph remains illuminated when the engine is running, check:

The continuity between track 4 of the 26 track blue passenger compartment connection unit connector (F) and track (*) of the injection computer connector,

(*) F9Q injection on track 2 of the injection computer connector.

(*) L7X and F3R injection on track 43 of the injection computer connector.

(*) F4R injection on track 70 of the injection computer connector.

AFTER REPAIR	Erase the computer memory by entering GO**.

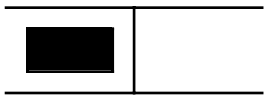
9	**Bargraph 9 RH side illuminated, engine running Flow meter circuit** **XR25 aid :** Illuminated engine running	Fiche n° 67 side 1 / 3°

NOTES	With ADAC only.

If the bargraph remains extinguished, check:

- The continuity between track 11 of the 12 track blue connector (E) on the passenger compartment connection unit and track (*) of the injection computer.
- (*) F3R injection on track 13 of the injection computer connector.
- (*) F4R injection on track 11 of the injection computer connector.
- (*) F9Q injection on track 32 of the injection computer connector.
- (*) L7X injection on track 15 of the injection computer connector.
- The insulation on track 11 of the 12 track blue connector (E) on the passenger compartment connection unit.

AFTER REPAIR	Erase the computer memory by entering GO**.

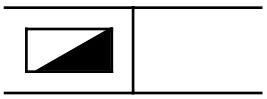
10 	**Bargraph 10 LH side extinguished, engine running** **Battery charge** **XR25 aid :** Extinguished, engine running	Fiche n° 67 side 1 / 3°

NOTES	Dealt with in fault bargraph 5 LH side or 9 LH side.

10 	**Bargraph 10 RH side extinguished, engine running** **Oil pressure** **XR25 aid :** Extinguished, engine running	Fiche n° 67 side 1 / 3°

NOTES	Dealt with in 4 RH side or 9 LH side.

11



Fiche n° 67 side 1/3°

Bargraph 11 LH side incorrect illumination

Injection connection

XR25 aid : Illuminates for 3 seconds when the ignition is switched on

NOTES

Two cases are dealt with:
- BG 11 LH side remains extinguished when the ignition is switched on: case 1.
- BG 11 LH side remains illuminated for more than 3 seconds: case 2.

Use bornier ELé 1506 to make the measurements.

Case 1

If the bargraph does not illuminate, check:
- The continuity between track 21 of the 26 track blue connector (F) on the passenger compartment connection unit (BII) and track (*) of the injection computer.
- (*) F9Q and F3R injection on track 26 of the injection computer connector.
- (*) L7X injection on track 15 of the injection computer connector.
- (*) F4R Injection on track 34 of the injection computer connector.

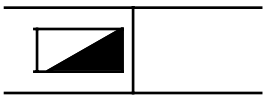
Case 2

If the bargraph remains illuminated, check:
- The insulation between track 21 of the 26 track blue connector (F) on the passenger compartment connection unit (BII) and earth.

AFTER REPAIR

Erase the computer memory by entering GO**.

12



Bargraph 12 LH side incorrect illumination

ABS connection

Fiche n° 67 side 1/3°

XR25 aid : Illuminates for 3 seconds with the ignition switched on

NOTES

Only for vehicles equipped with ABS
Two cases are dealt with:.
- BG 12 LH side always remains extinguished when the ignition is switched on : case 1
- BG 12 LH side remains illuminated without a fault: case 2

Use bornier ELé 1506 to make the measurements.

Case 1

If the bargraph does not illuminate, check:
- The continuity between track 13 of the 26 track blue connector (F) on the passenger compartment connection unit (BII) and track 21 of the ABS computer.

Case 2

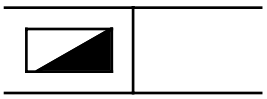
If the bargraph remains illuminated, check:
- The insulation between track 13 of the 26 track blue connector (F) on the passenger compartment connection unit (BII) and earth.

AFTER REPAIR

Erase the computer memory by entering GO**.

B54531.0

13



Fiche n° 67 side 1 / 3°

Bargraph 13 LH side incorrect illumination

Diesel preheating connection

XR25 aid : Illuminates for 3 seconds with the ignition switched on

NOTES

Only for diesel vehicles

Two cases are dealt with:

- BG 13 LH side remains extinguished when the ignition is switched on: case 1.
- BG 13 LH side remains illuminated without preheating function: case 2.

Use bornier ELé 1506 to make the measurements.

Case 1

If the bargraph does not illuminate, check:

- The continuity between track 24 of the 26 track blue connector (F) on the passenger compartment connection unit (BII) and track 54 of the diesel injection computer.

Case 2

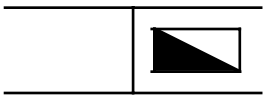
If the bargraph remains illuminated without preheating function, check:

- The insulation between track 24 of the 26 track blue connector (F) on the passenger compartment connection unit (BII) and earth.

AFTER REPAIR

Erase the computer memory by entering GO**.

13



Fiche n° 67 side 1/3°

Bargraph 13 RH side incorrect illumination

Air bag connection

XR25 aid : Illuminates for 3 seconds with the ignition switched on

NOTES

Two cases are dealt with:
- BG 13 RH side remains extinguished when the ignition is switched on: case 1.
- BG 13 RH side remains illuminated without fault: case 2.

Use bornier ELé 1506 to make the measurements.
Lock the air bag computer.

Case 1

If the bargraph does not illuminate, check:

- See configuration of the passenger compartment connection unit.
- The continuity between track 6 of the 26 track yellow connector (A) on the passenger compartment connection unit (BII) and track 8 of the air bag computer.

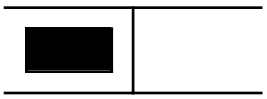
Case 2

If the bargraph remains illuminated without a fault, check:
- The insulation between track 6 of the 26 track yellow connector (A) on the passenger compartment connection unit (BII) and earth.

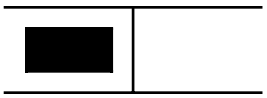
The bargraph also illuminates when the air bag computer is locked.

AFTER REPAIR

Erase the computer memory by entering GO**.

18 	**Bargraph 18 LH side illuminated** Fiche n° 67 side 1/3° **Open rear screen** **XR25 aid: Illuminated with open rear screen.** **Extinguished with rear screen closed.**
NOTES	None.

18 	**Bargraph 18 LH side illuminated** Fiche n° 67 side 1/3° **"MIL" warning light (pollution warning light)** **XR25 aid: Illuminated with MIL warning light F4R engines.** **Extinguished without MIL warning light.**
NOTES	Only if radio display is combined with instrument panel.

19 	**Bargraph 19 LH side illuminated** Fiche n° 67 side 1/3° **Metric configuration** **XR25 aid: Illuminated when speed in km/h.** **Extinguished when speed in Mph.**
NOTES	None.

19 	**Bargraph 19 LH side illuminated** Fiche n° 67 side 1/3° **"RADIO OFF" Message** **XR25 aid: Illuminated message absent.** **Extinguished message displayed.**
NOTES	Only if radio display is combined with instrument panel.
AFTER REPAIR	Erase the computer memory by entering GO**.

20 	**Bargraph 20 RH side illuminated** Fiche n° 67 side 1/3° **COOLANT INITIALISED** **XR25 aid: Extinguished, coolant temperature not indicated on the instrument panel.** **Illuminated, coolant temperature indicated on the instrument panel.**
NOTES	None.

AFTER REPAIR	Erase the computer memory by entering GO**.

Important:

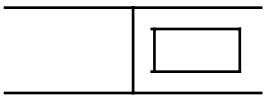
When replacing a passenger compartment connection unit BII, the mileage is retained in the instrument panel memory.

When connecting the new passenger compartment connection unit BII, the mileage in the memory will be displayed automatically on the new component.

Do not carry out fault finding using a substitute component from another vehicle, as the higher mileage will be memorised and will be displayed on both vehicles.

AFTER REPAIR	Erase the computer memory by entering GO**.

B54531.0

2 	**Bargraph 2 RH side incorrect illumination** + ACCESSORIES FEED PRESENT

Fiche n°69 3 / 3

NOTES	Reminder: In normal operation - BG **2 RH side** illuminated ignition switch in + accessories position - BG **2 RH side** extinguished ignition off Use bornier ELé 1506 to make the measurements.

Check the condition of the + accessories feed fuse.

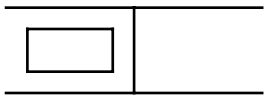
Replace the fuse if necessary.

Ignition switch in + accessories position, check for a voltage of + 12 Volts on track **5** of the 26 track yellow passenger compartment connection unit (BII) connector.

Is there 12 volts?

YES	Replace the passenger compartment connection unit (BII).
NO	Repair the wiring between track **5** of the 26 track yellow passenger compartment connection unit (BII) connector and the passenger compartment fuse board.

AFTER REPAIR	Enter GO* to erase the memory. Check the configuration of the passenger compartment connection unit.

2 	Fiche n°69 3 / 3° **Bargraph 2 LH side incorrect illumination** + AFTER IGNITION FEED PRESENT

NOTES	Reminder: In normal operation - BG **2 LH side** illuminated ignition switch in + after ignition position - BG **2 LH side** extinguished ignition switch in position other than + after ignition Use bornier ELé 1506 to make the measurements.

Check + after ignition feed fuse.

Replace the fuse if necessary.

Ignition on, check for a voltage of + 12 Volts on track **17** of the 26 track yellow passenger compartment connection unit (BII) connector.

Is there 12 volts?

YES	Replace the passenger compartment connection unit (BII).
NO	Repair the wiring between track **17** of the 26 track yellow connection unit (BII) connector and the passenger compartment fuse board.

AFTER REPAIR	Enter GO* to erase the memory. Check the configuration of the passenger compartment connection unit.

Fiche n°69 3 / 3°

4

Bargraph 4 LH side incorrect illumination

Side lights

NOTES	Illuminated when the lights stalk is in the side lights position. For measurements on the passenger compartment connection unit use bornier ELé 1506 .

Loss of side lights and / or warning lights function

Lights stalk in side lights position.
Is bargraph 4 LH side illuminated?

no → Check the F42 fuse.
Has the fuse blown?

no → Check the connection between the F42 fuse and track B2 of the stalk.
Is the connection good?

no → Repair

yes → Check for +12 volts on track B1 of the stalk in side lights position.
Is there 12 volts?

no → Replace the stalk

yes → Check the connection between fuse F1, F2 and track B1 of the stalk
Is there 12 volts?

no → Repair

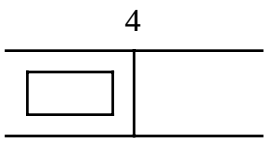
yes → A

yes → Replace the F42 fuse.

yes → A

AFTER REPAIR	Check that it is operating correctly. Check the configuration of the passenger compartment connection unit.

B54531.0



Fiche n°69 3 / 3°

Bargraph 4 LH side incorrect illumination

Side lights

NOTES CONT	Illuminated when the lights stalk is in side lights position. Use bornier ELé 1506 to make the measurements.

Loss of side lights and / or warning lights function

A

Check the F1 and F2 fuses. Has one or both of the fuses blown?

yes → Replace the fuse (F1 and / or F2).

no

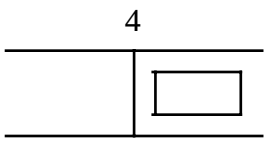
For the LH side lights check the line for the fuse F10 to tracks:
- A2 for the LH headlight,
- 5 for the rear left hand light,
- 7 of the 26 track yellow passenger compartment connection unit connector (A) for the warning light

no

For the right hand side lights check the line for the fuse F2 to tracks:
- A2 for the right hand headlight
- 3 for the rear right hand light

AFTER REPAIR	Check that it is operating correctly. Check the configuration of the passenger compartment connection unit.

B54531.0



Fiche n° 69 side 3 / 3°

Bargraph 4 RH side incorrect illumination

Dipped headlights

NOTES

Illuminated when the lights stalk is in dipped headlights position
Use bornier ELé 1506 to make the measurements.

Loss of dipped headlights and / or warning lights function

The stalk is in dipped headlights position. Is bargraph 4 RH side illuminated?

no → Check the fuse F42. Has the fuse blown?

yes → Replace the F42 fuse.

no → Check the connection between fuse F42 and track B3 of the stalk. Is the connection good?

no → Repair

yes → Check for +12 volts on track B4 of the stalk in dipped headlights position. Is there 12 volts?

no → Replace the stalk

yes → Check for +12 volts on track 1 of the relay and on track 21 of the yellow passenger compartment connection unit connector (A) Is there 12 volts?

no → Repair

yes

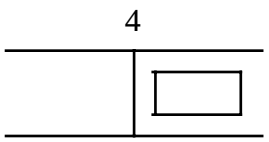
yes

A

AFTER REPAIR

Check that it is operating correctly.
Check the configuration of the passenger compartment connection unit.

B54531.0



Fiche n° 69 side 3/3°

Bargraph 4 RH side incorrect illumination

Dipped headlights

NOTES CONT 1	Illuminated when the lights stalk is in dipped headlights position Use bornier ELé 1506 to make the measurements.

Loss of dipped headlights and/or warning lights function

A

Check earth on track 2 of the relay.
Is there earth?

no → Repair

yes

Check for +12 volts on track 3 of the relay
Is there 12 volts?

no → Check fuse F50 in the engine compartment.
Has the fuse blown?

yes → Replace the fuse

no

Check the connection between fuse F50 and track 3 of the relay.
Is the connection good?

no → Repair

yes

yes

Check for +12 volts on track 5 of the relay.
Is there 12 volts?

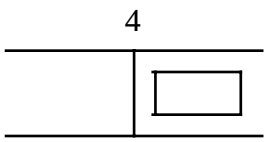
no → Replace the relay

yes

B

AFTER REPAIR	Check that it is operating correctly. Check the configuration of the passenger compartment connection unit.

B54531.0



Fiche n° 69 side 3/3°

Bargraph 4 RH side incorrect illumination

Dipped headlights

NOTES CONT 2

Illuminated when the lights stalk is in dipped headlights position
Use bornier ELé 1506 to make the measurements.

B

Loss of dipped headlights and/or warning lights function

Check the fuse F58 and 59 in the engine compartment.
Has the fuse blown?

no → Check the connection between fuse F 58 or 59 and track 5 of the relay.
Is the connection good?

no → Repair

yes → Replace the fuse

yes → Check the connection between track 5 of the relay and track B1 of the headlights connector.
Is the connection good?

no → Repair

yes → Check for earth on track B1 of the headlights.
Is there earth?

no → Repair

yes → Check the bulbs.

AFTER REPAIR

Check that it operates correctly.
Check the configuration of the passenger compartment connection unit.

B54531.0

5

Fiche n° 69 side 3 / 3°

Bargraph 5 LH side incorrect illumination

Reverse gear selected

NOTES	Illuminated when the command for reverse is selected Use bornier ELé 1506 to make the measurements.

Loss of reversing lights function in manual gearbox

Reverse gear selected, is bargraph 5 LH side illuminated?

no → Check fuses F18 and F13. Have they blown?

yes → Replace the fuse

no → Check for 12 Volts on the reverse gear switch. On track A2 if G8T. On track 3 if F9Q or F3R. Is there 12 volts?

no → Replace the switch

yes → Check for 12 Volts on the reversing lights on track 2 Is there 12 volts?

no → Repair

yes → Check the bulbs

yes

AFTER REPAIR	Check that it is operating correctly. Check the configuration of the passenger compartment connection unit.

B54531.0

5

Fiche n° 69 side 3 / 3°

Bargraph 5 LH side incorrect illumination

Reverse gear selected

NOTES	Illuminated when the command for reverse is selected Use bornier ELé 1506 to make the measurements.

Loss of reversing lights function in automatic transmission

Reverse gear selected.
Is bargraph 5 LH side illuminated?

no → Check fuses F18 and F13.
Have they blown?

yes → Replace the fuse

no → Check for 12 Volts on the automatic transmission multifunction switch on track 8 and 9
Is there 12 volts?

no → Replace the switch

yes → Check for 12 Volts on the reversing lights
on track 2 for the LH side
on track 5 for the RH side
Is there 12 volts?

no → Repair

yes → Check the bulbs

AFTER REPAIR	Check that it is operating correctly. Check the configuration of the passenger compartment connection unit.

B54531.0

5

Fiche n° 69 side 3 / 3°

Bargraph 5 RH side incorrect illumination

Main beam headlights

NOTES	Illuminated when the lights stalk is in main beam headlights position Use bornier ELé 1506 to make the measurements.

Loss of main beam headlights and / or warning lights function

Stalk in main beam headlights position. Is bargraph 5 RH side illuminated?

no → Check the fuse F42. Has the fuse blown?

yes → Replace the F42 fuse.

no → Check the connection between fuse F42 and track B6 of the stalk. Is the connection good?

no → Repair

yes → Check for +12 volts on track B7 of the stalk in main beam headlights position Is there 12 volts?

no → Replace the combined wash / wipe stalk

yes → Check for+12 volts on track 1of the relay and on track 19 of the 26 track yellow passenger compartment connection unit connector (A) Is there 12 volts?

no → Repair

yes

yes → A

AFTER REPAIR	Check that it is operating correctly. Check the configuration of the passenger compartment connection unit.

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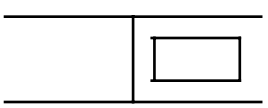


Fiche n° 69 side 3 / 3°

Bargraph 5 RH side incorrect illumination

Main beam headlights

NOTES CONT 1	Illuminated when the lights stalk is in main beam headlights position. Use bornier ELé 1506 to make the measurements.

Loss of main beam headlights and / or warning lights function

A

Check for earth on track 2 of the relay
Is there earth?

no → Repair

yes

Check for +12 volts on track 3 of the relay
Is there 12 volts?

no → Check fuse F50 in the engine compartment.
Has the fuse blown?

yes → Replace the fuse

no

Check the connection between fuse F 50 and track 3 of the relay.
Is the connection good?

no → Repair

yes

yes

Check for +12 volts on track 5 of the relay
Is there 12 volts?

no → Replace the relay

yes

B

AFTER REPAIR	Check that it is operating correctly. Check the configuration of the passenger compartment connection unit.

B54531.0

5

Fiche n° 69 side 3 / 3°

Bargraph 5 RH side incorrect illumination

Main beam headlights

NOTES CONT 2

Illuminated when the lights stalk is in main beam headlights position
Use bornier ELé 1506 to make the measurements.

Loss of main beam headlights and / or warning lights function

B

Check fuse F66 in the engine compartment.
Has the fuse blown?

no → Check the connection between fuse F66 and track 5 of the relay.
Is the connection good?

no → Repair

yes → Replace the fuse

yes → Check the connection between track 5 of the relay and track C2 of the headlights connector.
Is the connection good?

no → Repair

yes → Check for earth on track B1 of the headlights.
Is there earth?

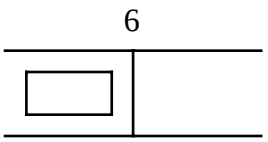
no → Repair

yes → Check the bulbs

AFTER REPAIR

Check that it is operating correctly.
Check the configuration of the passenger compartment connection unit.

B54531.0



Fiche n° 69 side 3 / 3°

Bargraph 6 LH side incorrect illumination

Hazard warning lights

NOTES	Illuminated when the button is in hazard warning lights position Use bornier ELé 1506 to make the measurements. Command for ending action on the XR25 : enter G66*

Loss of hazard warning lights function

Hazard warning lights button in operation
Is bargraph 6 LH side illuminated?

no → On the XR25 enter command G19*.
Do the hazard warning lights function?

no → Replace the passenger compartment connection unit BII

yes → See fault finding A for indicators

yes → Check for earth on track 4 of the button
Is there earth?

no → Repair the wiring

yes → Check the connection on track 4 of the 26 track yellow connector (B) and track 6 of the button

no → Repair the wiring

yes → Replace the button

AFTER REPAIR	Check that it is operating correctly. Check the configuration of the passenger compartment connection unit.

B54531.0

6

Fiche n° 69 side 3 / 3°

Bargraph 6 RH side incorrect illumination

Left and right hand side indicator

NOTES	Illuminated when the stalk is in RH side or LH side indicator position End action command on the XR25: enter G66* Use bornier ELé 1506 to make the measurements.

Loss of right hand side indicator function

The stalk is in RH or LH side indicator position.
Is bargraph 6 RH side illuminated

no → On the XR25 enter command
G17* for the right hand indicators
G18* for the left hand indicators
The indicators should illuminate.
Do the indicators illuminate?

yes → A

yes → Check the stalk earth on track 6
Is there earth?

no → Repair

yes → Check the connection of the stalk.
On track A7 and track 17 of the 26 track yellow passenger compartment connection unit connector (B) for the left hand indicators.
On track A5 and track 3 of the 26 track yellow passenger compartment connection unit connector (B) for the right hand indicators.
Is the connection good?

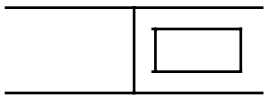
no → Repair the wiring

yes → Replace the stalk

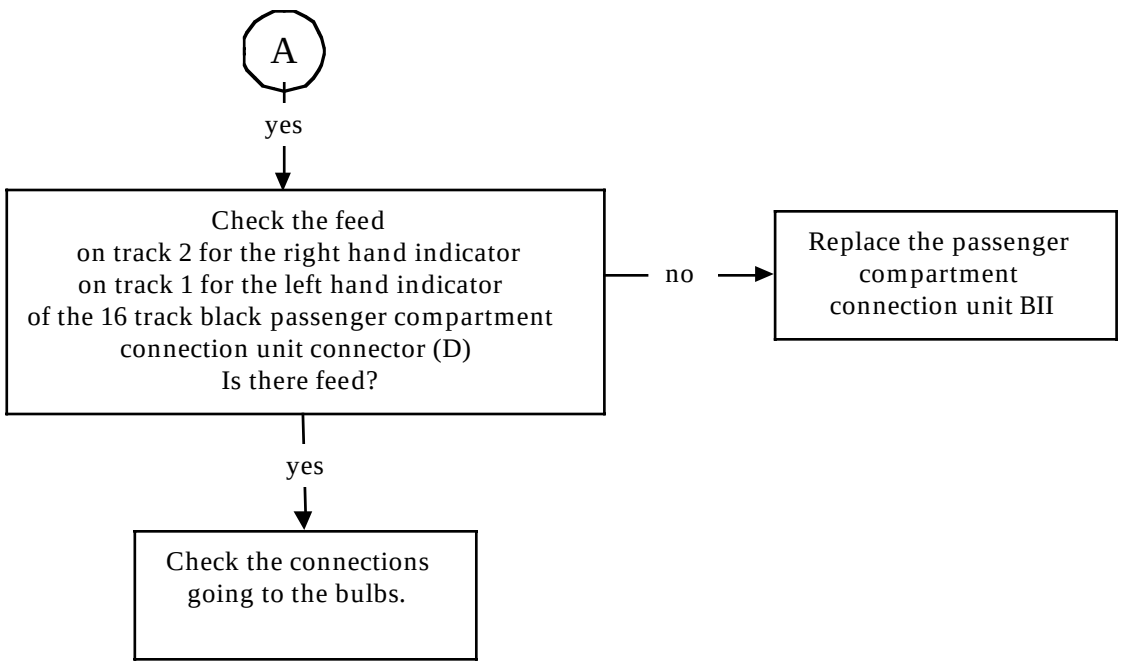
no → A

AFTER REPAIR	Check that it is operating correctly. Check the configuration of the passenger compartment connection unit.

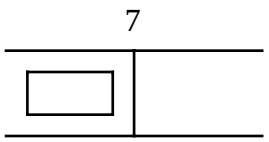
B54531.0

6 	Fiche n° 69 side 3 / 3° **Bargraph 6 RH side incorrect illumination** **Left and right hand indicators**

NOTES CONT	Illuminated when the stalk is in RH side or LH side indicator position End action command on the XR25: enter G66* Use bornier ELé 1506 to make the measurements.



AFTER REPAIR	Check that it is operating correctly. Check the configuration of the passenger compartment connection unit.



Fiche n° 69 side 3 / 3°

Bargraph 7 LH side incorrect illumination

Front fog lights

NOTES	Illuminated when the stalk is in front fog lights position End action command on the XR25: enter G66* Use bornier ELé 1506 to make the measurements.

Loss of front fog lights function

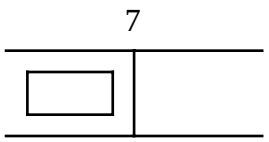
The stalk is in front fog lights position.
Is bargraph 7 LH side illuminated?

- yes → B
- no → A

Enter command G06* on the XR25. Do the front fog lights illuminate?

- yes → A
- no → B

AFTER REPAIR	Check that it is operating correctly.

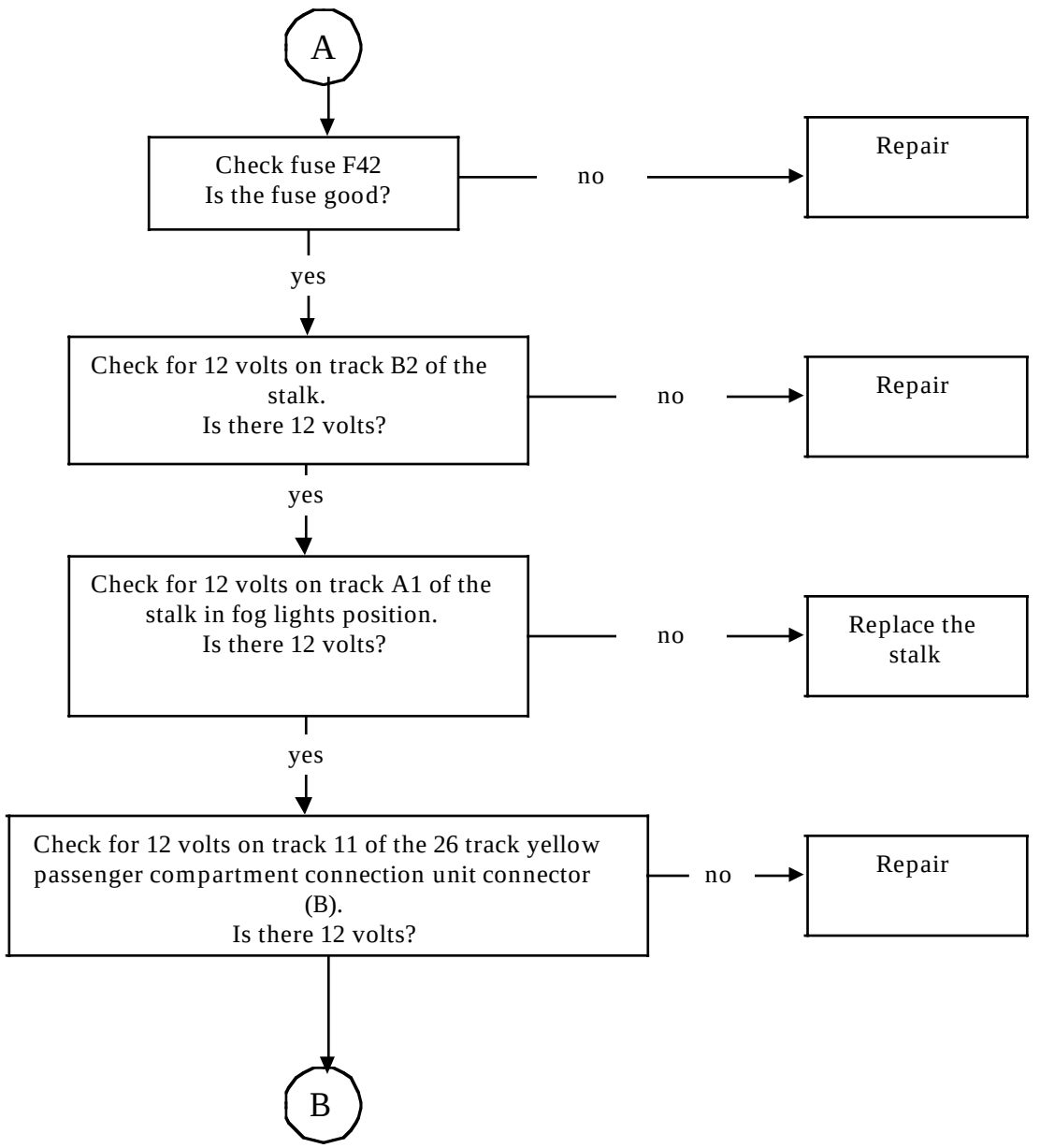


Fiche n° 69 side 3 / 3°

Bargraph 7 LH side incorrect illumination

Front fog lights

NOTES CONT	Illuminated when the stalk is in front fog lights position End action command on the XR25: enter G66* Use bornier ELé 1506 to make the measurements.



AFTER REPAIR	Check that it is operating correctly.

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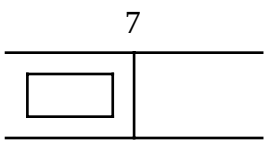
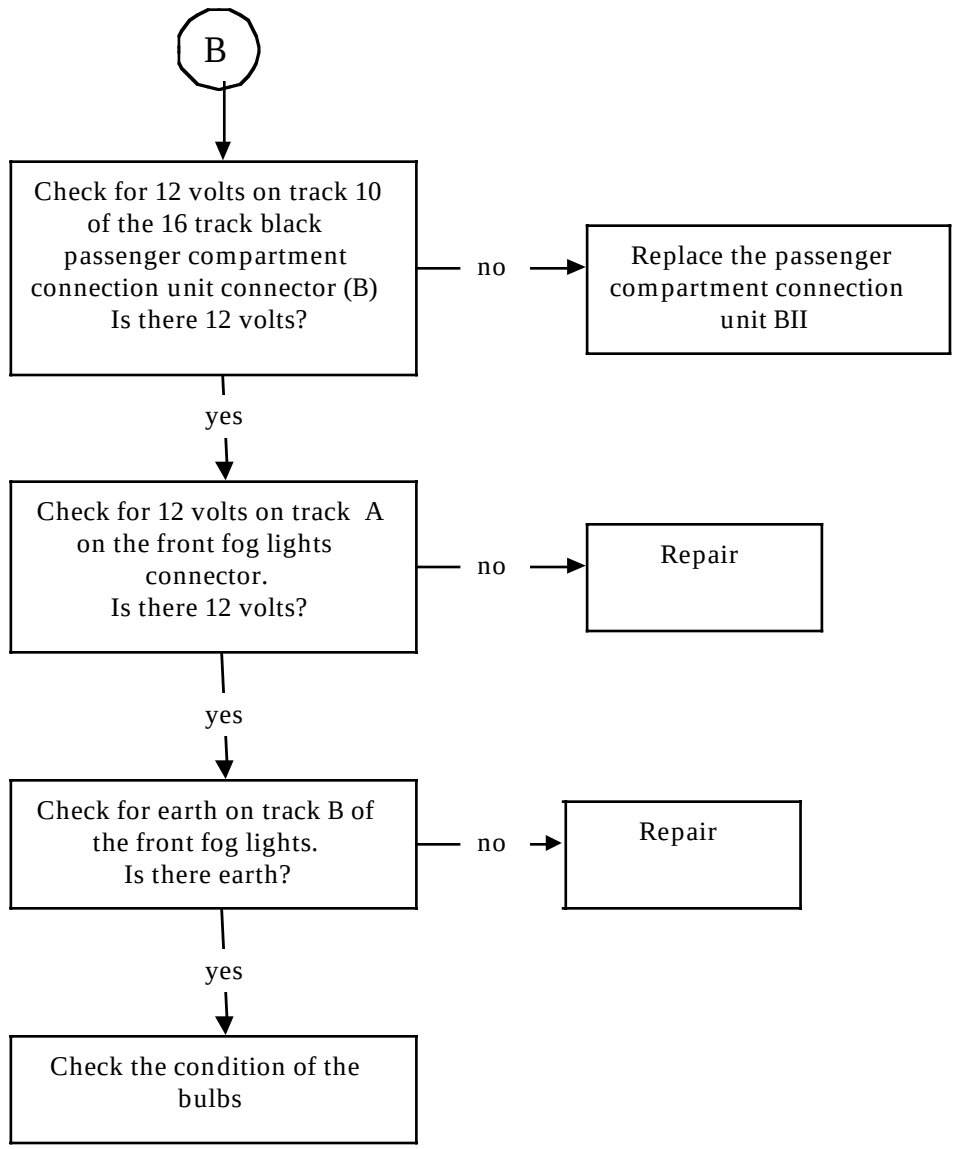


Fiche n° 69 side 3 / 3°

Bargraph 7 LH side incorrect illumination

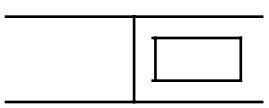
Front fog lights

NOTES CONT	Illuminated when the control is in fog lights position End action command on thee XR25: enter G66* Use bornier ELé 1506 to make the measurements.



AFTER REPAIR	Check that it is operating correctly. Check the configuration of the passenger compartment connection unit.

B54531.0



Fiche n° 69 side 3 / 3°

Bargraph 7 RH side incorrect illumination

Rear fog lights

NOTES	Illuminated when the stalk is in fog lights position. End action command on the XR25: enter G66*. Use bornier ELé 1506 to make the measurements.

Loss of rear fog lights function

Stalk is in rear fog lights position.
Is bargraph 7 LH side illuminated?

yes → B

no → A

Enter command G07* on the XR25. Do the fog lights illuminate?

yes → A

no → B

AFTER REPAIR	Check that it is operating correctly.

B54531.0

7	Fiche n° 69 side 3 / 3° **Bargraph 7 RH side incorrect illumination** **Rear fog lights**

NOTES CONT 1	Illuminated when the stalk is in rear fog lights position End action command on the XR25: enter G66* Use bornier ELé 1506 to make the measurements.

Loss of rear fog lights function

A

Check fuse F42
Is the fuse in good condition?
— no → Repair

yes

Check for 12 volts on track B2 of the stalk
Is there 12 volts?
— no → Repair

yes

Check for 12 volts on track A3 of the stalk in rear fog lights position.
Is there 12 volts?
— no → Replace the stalk

yes

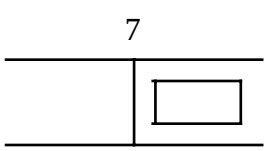
Check for 12 volts on track 24 of the 26 track yellow passenger compartment connection unit connector (B).
Is there 12 volts?
— no → Repair

yes

B

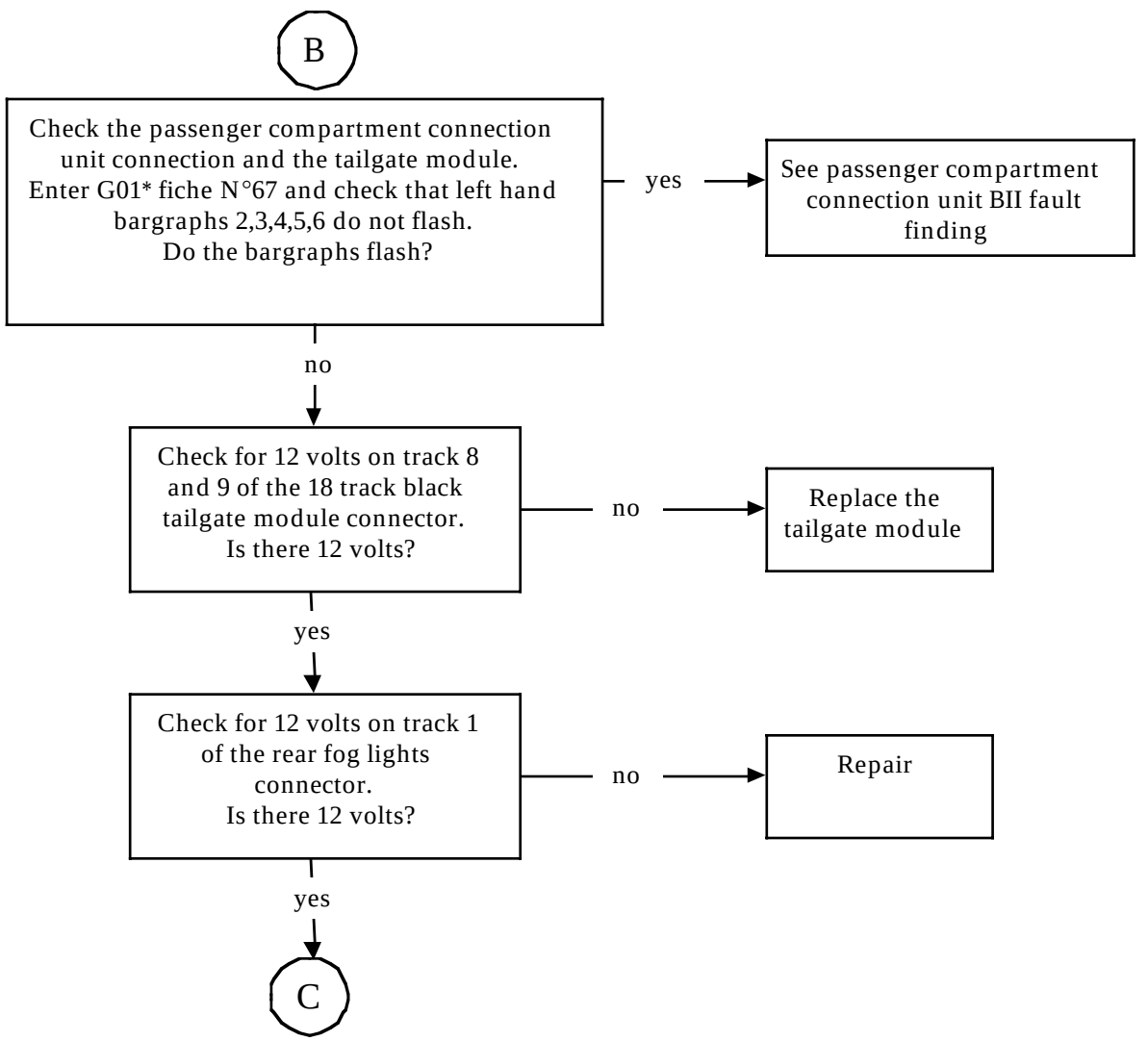
AFTER REPAIR	Check that it is operating correctly.

B54531.0

	Fiche n° 69 side 3 / 3° **Bargraph 7 RH side incorrect illumination** **Rear fog lights**

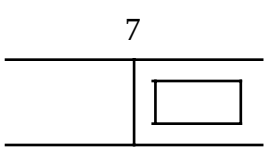
NOTES CONT 2	Illuminated when the stalk is in rear fog lights position End action command on the XR25: enter G66*. Use bornier ELé 1506 to make the measurements.

Loss of rear fog lights function



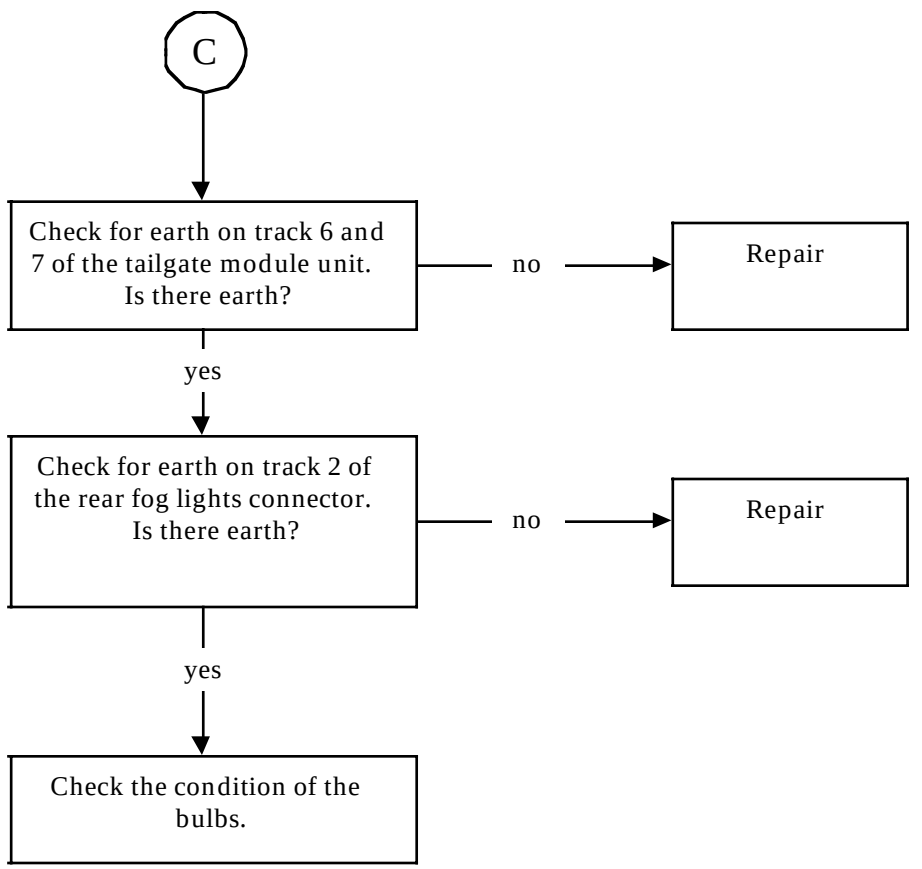
AFTER REPAIR	Check that it is operating correctly. Check the configuration of the passenger compartment connection unit.

B54531.0

	Fiche n° 69 side 3 / 3° **Bargraph 7 RH side incorrect illumination** **Rear fog lights**

NOTES CONT 2	Illuminated when the stalk is in rear fog lights position End action command on the XR25: enter G66*. Use bornier ELé 1506 to make the measurements.

Loss of rear fog lights function



AFTER REPAIR	Check that it is operating correctly.

B54531.0

8

Fiche n° 69 side 3 / 3°

Bargraph 8 LH side incorrect illumination

Timed front wiping

NOTES	Illuminated when the stalk is in timed front wiping position End action command on the XR25: enter G66* Use bornier ELé 1506 to make the measurements.

Loss of timed front wiping function

Stalk in timed position, are bargraphs 8 LH side and 10 LH side illuminated?

no

Check fuse F12
Is the fuse in good condition?

no → Replace the fuse

yes

Check for earth on track 7 of the stalk
Is there earth?

no → Repair

yes

Stalk in intermittent wipe position, check the resistance between tracks A7 and A1 which should be between:
0 Ohms / 10 KiloOhms
Is this the resistance?

no → Replace the stalk

yes

Check the connection on track A1 of the stalk and on track 7 of the 26 track yellow connection unit connector (B).
Is there continuity?

no → Repair

yes

Check the feed on track 16 of the 16 track black connection unit connector (D).
Is there 12 volts intermittent feed?

no → Replace the passenger compartment connection unit BII

yes

Check the connection between track 16 of the 16 track black connector (D) and track A1 of the wiper motor

no → Repair

yes

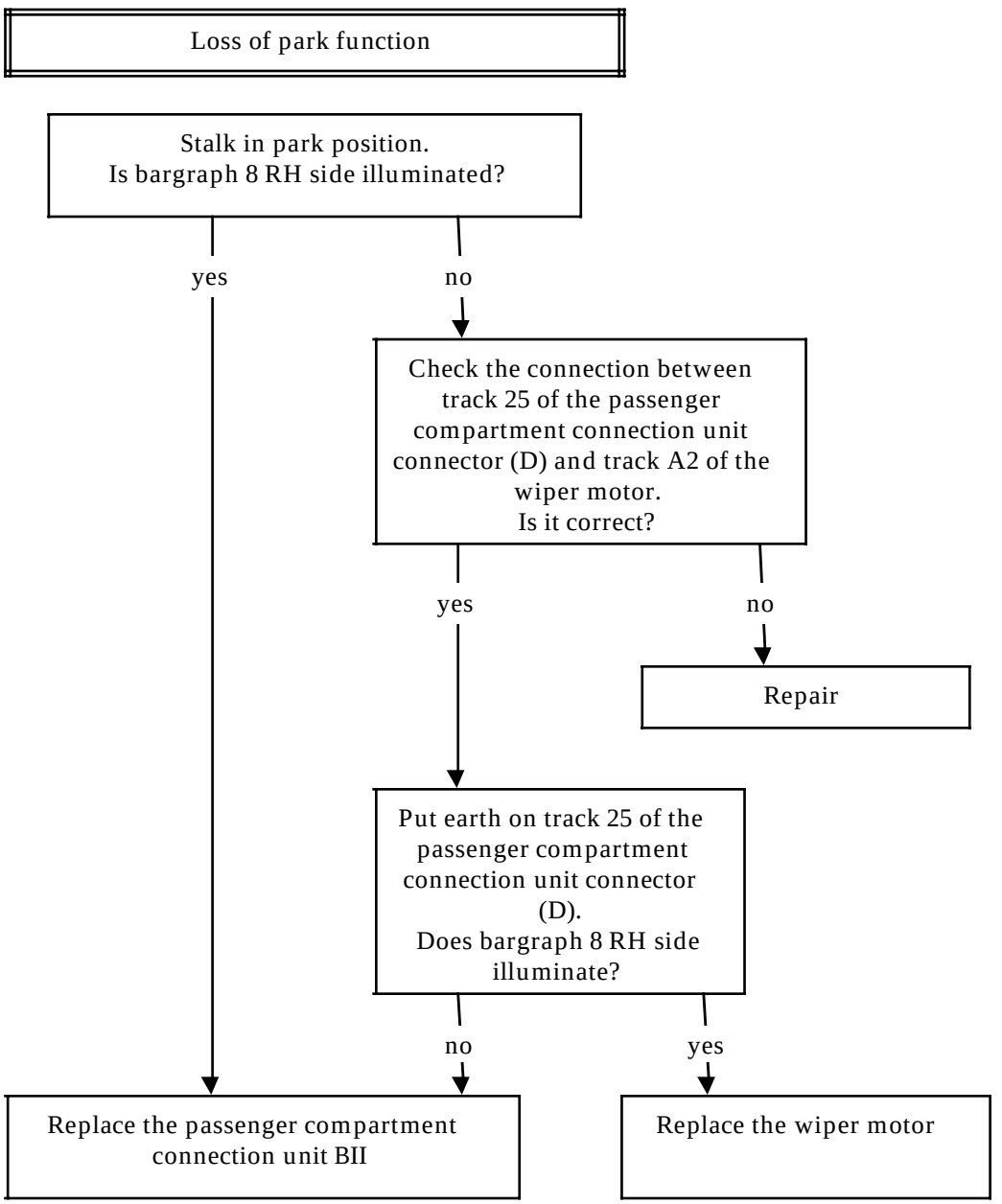
Replace the wiper motor

AFTER REPAIR	Check that it is operating correctly. Check the configuration of the passenger compartment connection unit.

B54531.0

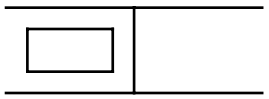
8	Fiche n° 69 side 3 / 3° **Bargraph 8 RH side incorrect illumination** **Front wiper park feed**

NOTES	Illuminated when the stalk is in park position



AFTER REPAIR	Check that it is operating correctly. Check the configuration of the passenger compartment connection unit.

B54531.0

9 	Fiche n° 69 side 3 / 3° **Bargraph 9 LH side incorrect illumination** **Front wiper park**
NOTES	Illuminated when the stalk is in park position See fault finding for bargraph 8 RH side

AFTER REPAIR	Check that it is operating correctly.

10

Fiche n° 69 side 3 / 3°

Bargraph 10 LH side incorrect illumination

Slow speed wipe

NOTES

Illuminated when the stalk is in slow speed position

Loss of slow speed front wiper function

Check fuse F12
Is the fuse in good condition?
- no → Replace the fuse
- yes → Check for earth on track 7 of the stalk
Is there earth?
- no → Repair
- yes → Stalk in slow speed position, check for earth on track A3
Is there earth?
- no → Replace the stalk
- yes → Check the connection between track A3 of the stalk and track 20 of the 26 track yellow passenger compartment connection unit connector (B)
Is there continuity?
- no → Repair
- yes → Check the feed on track 16 of the 16 track black passenger compartment connection unit connector (D)
Is there 12 volts?
- no → Replace the passenger compartment connection unit
- yes → Check the connection for track 16 of the 16 track black connector (D) and track A1 of the wiper motor
- no → Repair
- yes → Replace the the wiper motor

Stalk in timed position, are bargraphs 8LH side and 10 LH side illuminated?
- no → Check fuse F12 Is the fuse in good condition?
- yes → Check the connection between track A3 of the stalk and track 20 of the 26 track yellow passenger compartment connection unit connector (B) Is there continuity?

AFTER REPAIR

Check that it is operating correctly.
Check the configuration of the passenger compartment connection unit.

B54531.0

10

Fiche n° 69 side 3 / 3°

Bargraph 10 RH side incorrect illumination

Fast speed wiper

NOTES

Illuminated when the stalk in is fast speed position

Loss of front fast speed wiper function

Stalk in fast speed position
Is bargraph 10 RH side illuminated?

no → Repair

yes

Stalk in fast speed position,
check for earth on track A2 of the stalk
Is there earth?

no → Repair

yes

Check the continuity between track A2 of the stalk and track 6 of the 26 track yellow passenger compartment connection unit connector (B)
Is there continuity?

no → Replace the passenger compartment connection unit BII

yes

Check for +12V on track 8 on the 16 track black passenger compartment connection unit connector (D)
Is there 12 volts?

no → Repair

yes

Check the continuity between track 8 on the 16 track black passenger compartment connection unit connector (D) and the wiper motor on track B1
Is there continuity?

no → Repair

yes → Replace the wiper motor

AFTER REPAIR

Check that it is operating correctly.

B54531.0

11

Fiche n° 69 side 3 / 3°

Bargraph 11 LH side incorrect illumination

Locking

NOTES

Illuminated when pressing the button in lock position
Use bornier ELé 1506 to make the measurements.

Front door, rear door and fuel filler flap

Button held in lock position
Is bargraph 11 LH side illuminated?

no → Check earth on track B2 of the button
Is there earth?

yes → A

no → Repair

yes → Button held in lock position
check earth on track A1
Is there earth?

no → Replace the button

yes → Button held in lock position, check for earth on track 18 of the 26 track yellow passenger compartment connection unit connector (B).
Is there earth?

no → Repair

yes → Replace the passenger compartment connection unit

AFTER REPAIR

Check that it is operating correctly.
Check the configuration of the passenger compartment connection unit.

B54531.0

11	Fiche n° 69 side 3 / 3° **Bargraph 11 LH side incorrect illumination** **Locking**

NOTES CONT	Illuminated when when button is pressed in lock position Use bornier ELé 1506 to make the measurements.

Front door, rear door and fuel filler flap

A

Check for 12 volts on track 6 of the 16 track black connector (D), button held in lock position.
Is there 12 volts?

no → Replace the passenger compartment connection unit

yes

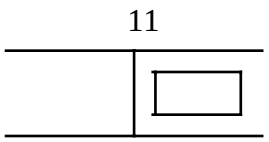
Check the connection for track 6 of the 16 track black connector (D) and track 1 of the doors motor, track 3 for the fuel filler flap.
Is the connection good?

no → Repair

yes

Replace the motor

AFTER REPAIR	Check that it is operating correctly. Check the configuration of the passenger compartment connection unit.



Fiche n° 69 side 3 / 3°

Bargraph 11 RH side incorrect illumination

Unlocking

NOTES	Illuminated when when button is pressed in unlock position Use bornier ELé 1506 to make the measurements.

Front door, rear door and fuel filler flap

Button held in unlock position
Is bargraph 11 RH side illuminated

no → Check for earth on track B2 of the button.
Is there earth?

no → Repair

yes → A

yes → Button held in unlock position, check for earth on track B3
Is there earth?

no → Replace the button

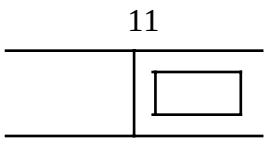
yes → Button held in unlock position, check earth on track 5 of the 26 track yellow passenger compartment connection unit connector (B)
Is there earth?

no → Repair

yes → Replace the passenger compartment connection unit

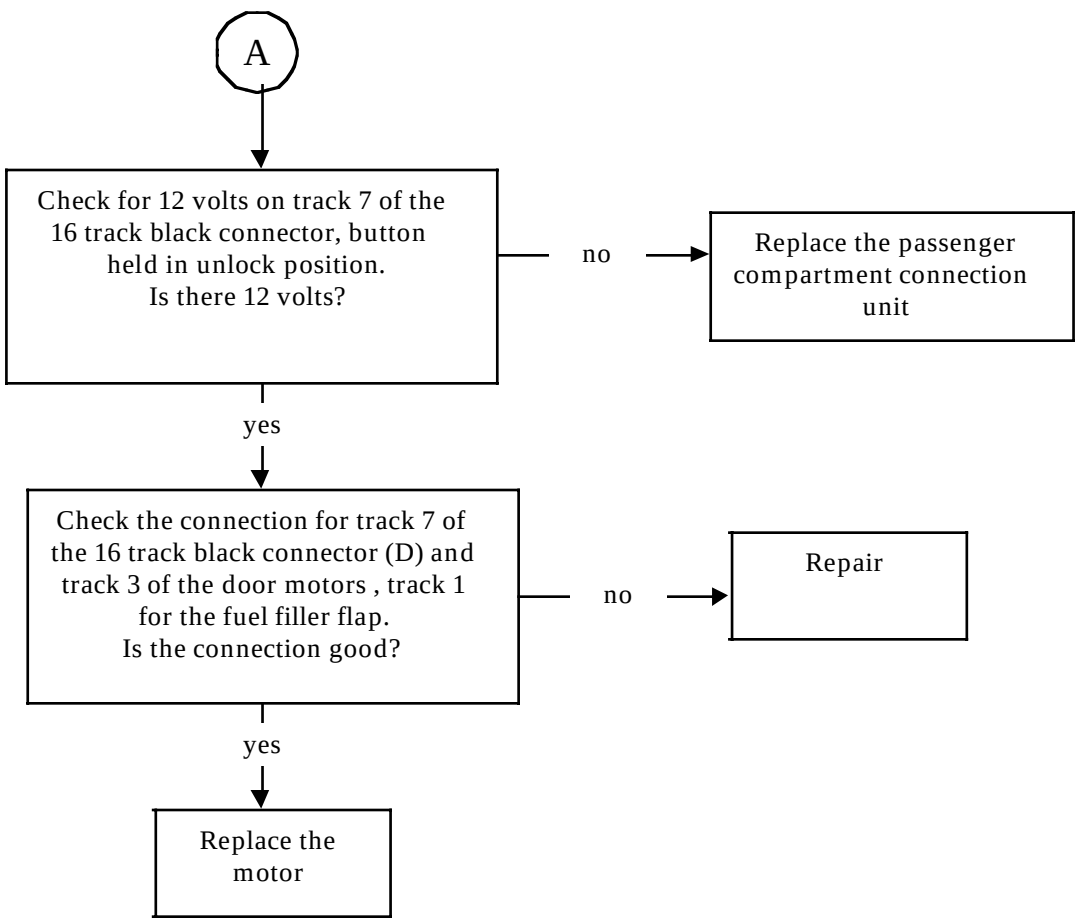
AFTER REPAIR	Check that it is operating correctly. Check the configuration of the passenger compartment connection unit.

B54531.0

	Fiche n° 69 side 3 / 3° **Bargraph 11 RH side incorrect illumination** **Unlocking**

NOTES CONT	Illuminated when button pressed in unlock position Use bornier ELé 1506 to make the measurements.

Front door, rear door and fuel filler flap



AFTER REPAIR	Check that it is operating correctly. Check the configuration of the passenger compartment connection unit.

B54531.0

12

Fiche n° 69 side 3 / 3°

Bargraph 12 RH side incorrect illumination

ADAC

NOTES	Illuminated when the command is activated.

Loss of ADAC function

Is bargraph 12 RH side illuminated?

yes

no

Check for earth on track B5 of the stalk
Is it correct?

no → Repair

yes

Check for earth on track B7 of the stalk by pressing the ADAC command
Is it correct?

no → Replace the stalk

yes

Check for earth on track 19 of the 26 track yellow passenger compartment connection unit connector (B)
Is it correct?

no → Repair

yes

Replace the passenger compartment connection unit BII

AFTER REPAIR	Check that it is operating correctly.

B54531.0

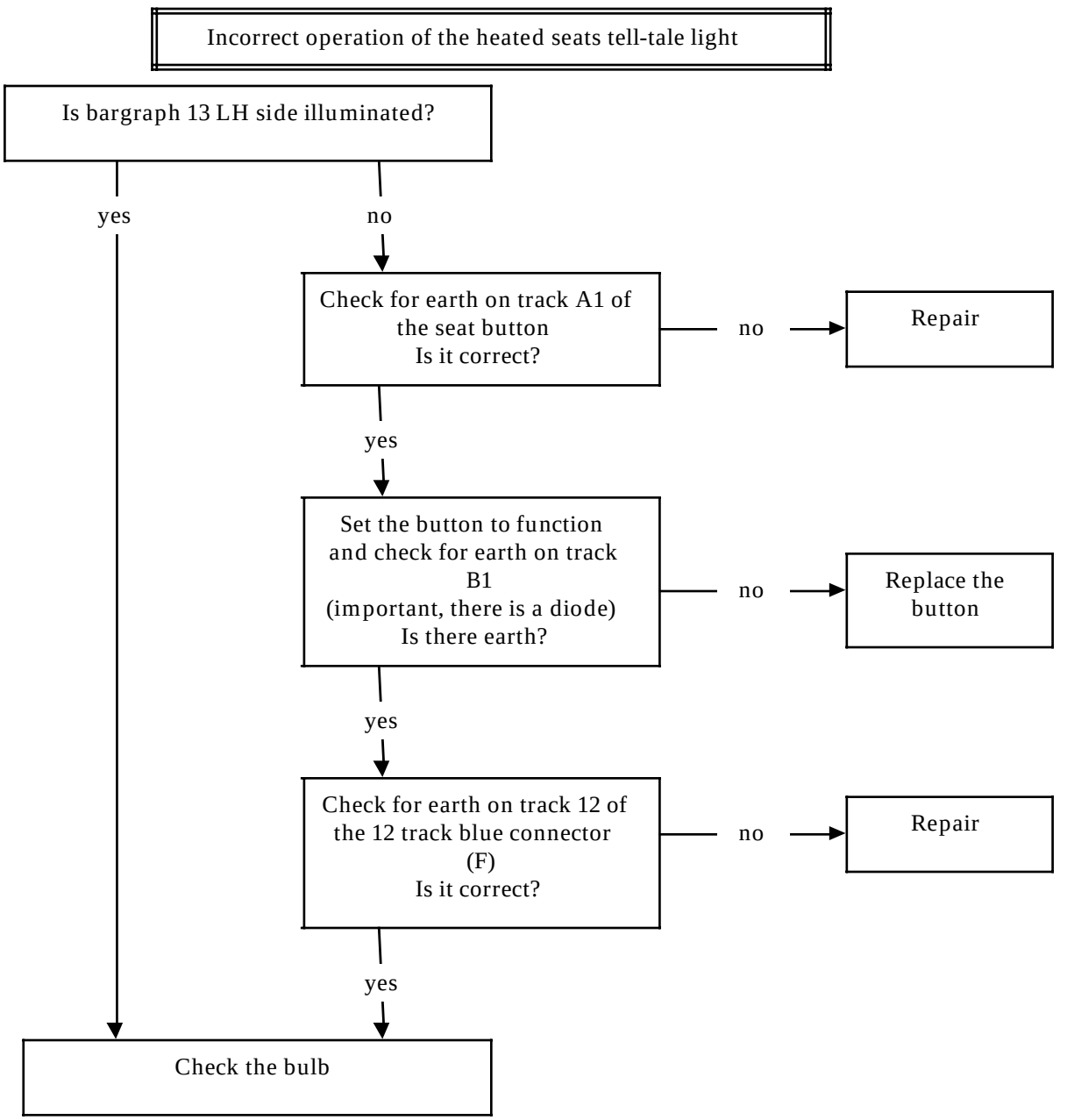
13

Fiche n° 69 side 3 / 3°

Bargraph 13 LH side incorrect illumination

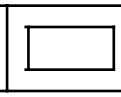
Heated seats

NOTES	Illuminated when the control is activated.

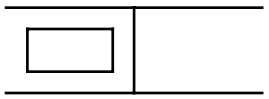


AFTER REPAIR	Check that it is operating correctly.

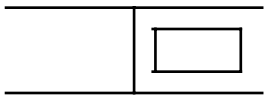
B54531.0

13 	Fiche n° 69 side 3 / 3° **Bargraph 13 RH side incorrect illumination** **Excess speed**
NOTES	Not active for this application.

AFTER REPAIR	Check that it is operating correctly.

14 	Fiche n° 69 side 3 / 3° **Bargraph 14 LH side incorrect illumination**
NOTES	Not active for this application.

AFTER REPAIR	Enter G0* to erase the memory.

14 	Fiche n° 69 side 3 / 3° **Bargraph 14 RH side** **Rear de-icing**
NOTES	Not active for this application.

AFTER REPAIR	Check that it is operating correctly.

15

Fiche n° 69 side 3 / 3°

Bargraph 15 LH side incorrect illumination

Rear washer

NOTES

Illuminated when the stalk is in rear washer position
For vehicles equipped with an opening screen check that the screen is correctly closed

Loss of rear washer function

Is bargraph 15 LH side illuminated?

no → Is there 12 Volts on track B1 of the stalk?

no → Replace the stalk

yes

yes → Check for earth on track B5 of the stalk
Is there earth?

no → Repair

yes

Is there 12 Volts on track A1 of the pump?

no → Repair

yes

yes → Is there 12 Volts on track B1 of the pump?

no → Replace the pump

yes

Check the connection between track A4 of the stalk and track B1 of the pump.
Is the connection correct?

no → Repair

yes

Replace the stalk

AFTER REPAIR

Check that it is operating correctly.

B54531.0

15

Fiche n° 69 side 3 / 3°

Bargraph 15 LH side incorrect illumination

Windscreen washer

NOTES

Illuminated when the stalk is in windscreen washer position

Loss of windscreen washer function

Is bargraph 15 LH side illuminated?

no → Check F15 Is it correct?

no → Replace the fuse

yes → Is there 12 Volts on track B4 of the stalk?

no → Repair

yes → When pressing the screen washer stalk is there 12 volts on track A4?

no → Replace the stalk

yes → Check the connection on track A4 of the stalk and track B1 of the pump Is the connection good?

no → Repair

yes → Check for earth on track B5 of the stalk Is there earth?

no → Repair

yes → Check for earth on track B1 of the stalk Is there earth?

no → Replace the stalk

yes → Check the connection on track B1 of the stalk and track A1 of the pump

no → Repair

yes → Replace the pump

AFTER REPAIR

Enter G0* to erase the memory.

B54531.0

15

Fiche n° 69 side 3 / 3°

Bargraph 15 RH side

Rear screen wiper

NOTES

For vehicles with an opening rear screen.
For vehicles equipped with an opening rear screen, check that the screen is correctly closed.

Loss of rear screen wiper function

Stalk in rear screen wiper position.
Is bargraph 15 LH side illuminated?

no → Check fuse F15
Is it correct?

no → Replace the fuse

yes

yes

Check the link connection on track 4 of the 26 track passenger compartment connection unit BII connector (A) and track 3 of the 18 track tailgate module connector?

no → Repair

yes

Check the tailgate and screen switches.
Are they correct?

no → Replace

yes

Check for earth on the tailgate module on track 1
Is there earth?

no → Repair

yes

Replace the tailgate module

Check for 12 volts on track B4 of the wiper stalk
Is there 12 volts?

no → Repair

yes

Check for 12 volts on track B2 of the stalk in rear screen wiper position.
Is there 12 volts?

no → Replace the stalk

yes

Check for 12 volts on track 12 of the 26 track yellow passenger compartment connection unit connector (B)
Is there 12 volts?

no → Repair

AFTER REPAIR

Check that it is operating correctly.

B54531.0

16

Fiche n° 69 side 3 / 3°

Bargraph 16 RH side incorrect illumination

Driver's electric window

NOTES	Illuminated when the control is operated End action command on the XR25: enter G66* Use bornier ELé 1506 to make the measurements.

Loss of driver's electric window function

Driver's electric window button held in raise or lower position.
Is bargraph 16 RH side illuminated?

no → On the XR25 enter command
G15* to raise the window.
G16* to lower the window.
Does the window raise or lower?

yes → B

yes → Bornier in place
Check the continuity of the line:
On track 24 of the 26 track yellow connector (A) and track A2 of the electric window button
On track 11 of the 26 track yellow connector (A) and track B2 of the electric window button.
Is there continuity?

no → Repair

no → B

yes → Check for earth on the driver's electric window button on track 3
Is there earth?

no → Repair

yes → Replace the driver's electric window button

AFTER REPAIR	Check that it is operating correctly.

B54531.0

16

Fiche n° 69 side 3 / 3

Bargraph 16 RH side incorrect illumination

Driver's electric window

NOTES CONT	Illuminated when the control is operated End action command on the XR25: enter G66* For measurements on the passenger compartment connection unit use bornier Elé 1506

Loss of driver's electric window function

B

Put the bornier in place, enter commands on the XR25
G15* to raise the window.
G16* to lower the window.
Check the voltage between tracks 3 and 4 of the 16 track black connector (D)
Is there a voltage?
Using command G15*= +12 volts
Using command G16*= -12 volts

no → Replace the passenger compartment connection unit BII

yes

Check the continuity on track 3 of the 16 track black passenger compartment connection unit connector (D) and track 2 of the electric window motor
Is there continuity?

no → Repair

yes

Check the continuity on track 4 of the 16 track black connector (D) and track 1 of the electric window motor
Is there continuity?

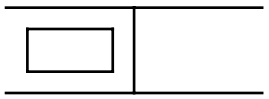
no → Repair

yes

Replace the electric window motor

AFTER REPAIR	Check that it is operating correctly. Check the configuration of the passenger compartment connection unit.

B54531.0

17 	Fiche n° 69 side 3 / 3° **Bargraph 17 LH side illuminated** **Tailgate or screen open**

NOTES	Illuminated when the tailgate or the screen is open

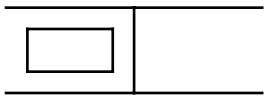
When the rear screen or the tailgate is open:

Illumination of courtesy lights: - Rear row

- Luggage compartment — Extinguishes immediately.

SEE CHART "Courtesy light illumination fault" on the following pages.

AFTER REPAIR	Check that it is operating correctly.

18 	Fiche n° 69 side 3 / 3° **Bargraph 18 LH side illuminated** **Front or rear passenger door open** **Driver's door open**

NOTES	Illuminated if door open.

NOTE: Normal operation of courtesy lights:

- When the radiofrequency PLIP is operated

  Illumination of courtesy lights: - Front and centre console
  - Middle row

  Timed when the doors are closed.

- When the front door is opened:

  Illumination of courtesy lights: - Front and centre console
  - Middle row.

  Timed when the doors are closed.

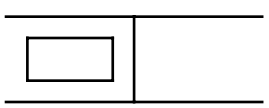
- -When the rear door is opened:

  Illumination of courtesy lights:

- Front and centre console	Timed extinguishing
- Middle row	Timed extinguishing
- Rear row	Extinguishes immediately
- Luggage compartment	Extinguishes immediately

SEE CHART "Courtesy light illumination fault" on the following pages.

AFTER REPAIR	Check that it is operating correctly.



Fiche n° 69 side 3 / 3°

Bargraph 17 or 18 LH side illuminated

Doors open.

Tailgate or screen open.

NOTES

Check fuse F28 and check for the presence of 12 volts on track 2 of the courtesy lights.
Set the courtesy lights to "door" position.

Enter command G11*
Do all the courtesy lights illuminate?

no → Check for earth on track 12 of the 26 track yellow passenger compartment connection unit connector A.
Is there earth?

no → Replace the passenger compartment connection unit

yes → Check the lines between track 12 of the 26 track yellow connection unit connector A
On track 1 for the front left hand side courtesy lights and map reading light 2nd line left hand side.
On track 9 for the front right hand courtesy lights and spot 2nd line right hand side and front console?
Are the lines correct?

no → Repair

yes → Replace the bulb

yes → Check the lines between the passenger compartment connection unit and the door switches.
On track A of the switch:
On track 18 of the 26 track yellow passenger compartment connection unit connector A for the front left hand side switch.
On track 23 of the 26 track yellow passenger compartment connection unit connector A for the front right hand side switch.
On track 9 of the 26 track yellow passenger compartment connection unit connector A for the rear door switch.
Are the lines correct?

no → Repair

yes → Check for earth on track B of the door switch
Is there earth?

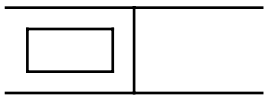
no → Repair

yes → Replace the switch

AFTER REPAIR

Check that it is operating correctly.

B54531.0

20 	Fiche n° 69 side 3 / 3° **Bargraph 20 LH side illuminated** **Faults present on fiche N°67 or N°68**

NOTES	Enter code G 01* for fiche 1n67 Enter code G 02* for fiche 2n68

AFTER REPAIR	Enter G0* to erase the memory.

ADDITIONAL CHECKS

COMMAND MODES **G--***

To use this function, enter **G** on the XR25, then the number of the desired command followed by a star.

06 Front fog lights command.

07 Rear fog lights command.

08 Door unlock command (activates the micromotors for 3 seconds on the unlock side).

09 Door lock command (activates the micromotors for 3 seconds on the lock side).

11 Front and rear courtesy light command.

15 Driver's window raise command.

16 Driver's window lower command.

17 Right hand indicator command.

18 Left hand indicator command.

19 Hazard warning lights command.

24 Windscreen wiper command.

25 Rear screen wiper command.

66 **End action command**