

# Laguna Safrane

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**N.T. 2958A**

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**X56X - B54X**

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**Basic manual: M.R. 302 or 307**

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## **PLIP TRANSPONDER OR RADIO FREQUENCY PLIP IMMOBILISER SYSTEMS SINGLE DECODER UNIT**

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***CANCELS AND REPLACES TECHNICAL NOTE 2725A Part Number 77 11 193 204***

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**Renault 1998**

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### GENERAL

**SAFRANE** and **LAGUNA** vehicles are fitted with a single decoder unit enabling the following to be controlled:

- the immobiliser, by a key detection system (called coded key immobiliser system),
- the locking/unlocking of the doors by an infrared (IF) or radio frequency (RF) PLIP.

### The engine immobiliser

A coded electronic chip independent of the PLIP function (which operates without batteries) is included in each head of the vehicle keys.

When the ignition is turned on, an antenna ring around the ignition switch interrogates and captures the code emitted by the key and transmits it to the decoder unit.

If the decoder unit recognises the code, the vehicle can be started.

The engine immobiliser is activated a few seconds after removing the key from the ignition switch, and this is shown by the flashing of the red warning light located on the instrument panel or on the central door locking button (depending on the vehicle).

If there is a fault in the key detection system an emergency code be entered either:

- by means of the **XR25** (all versions),
- by means of the central door locking button and the red immobiliser warning light (possible only on vehicles fitted with the old generation decoder unit part number: **77 00 416 293**).

This code may be obtained from your local assistance network, for example **Delta Assistance** in France.UK only. For use with XR25. N.V.S.R., by fax only.

### NOTE:

This system may be installed in either petrol or diesel vehicles.

**Petrol and diesel vehicles with direct injection (example: F9Q) :** the immobilisation is provided by the injection computer.

**Diesel vehicles with coded solenoid valve:** the immobilisation is provided by a coded solenoid valve (on injection pump).

**IMPORTANT: LAGUNA vehicles equipped with the F9Q or L7X engines and all petrol SAFRANE vehicles are fitted with a specific injection computer which only operates if it is coded.**

### Locking/ unlocking the doors

The infrared or radio frequency PLIP which is fitted to the vehicle is used for locking or releasing the opening elements and for setting or turning off the alarm (depending on equipment), it does not act on the engine immobiliser system.

The infrared or radio frequency code is rolling and will therefore vary whenever the remote control is pressed to prevent any copying.

When one of the transmitters (PLIPs) is replaced it will therefore be necessary to resynchronise.

**NOTES (special notes on vehicles fitted with the new decoder unit part number: 77 00 421 261)**

- It is no longer possible to lock the doors using the PLIP or the central locking button if the driver's door is open (switch information 1<sup>st</sup> notch).
- The central door locking button is inhibited if the doors have been locked using the PLIP.
- Locking of the doors using the PLIP is displayed by two flashes of the hazard warning lights and unlocking of the doors is displayed by one flash of the hazard warning lights (**SAFRANE**, depending on wiring and **LAGUNA Phase 2**).
- On **LAGUNA Phase 2** vehicles, the red indicator light on the central door locking button is a door locking indicator light:
  - it flashes after the doors are locked using the PLIP (driver's door closed) and extinguishes when they are unlocked,
  - it remains permanently illuminated after the doors are locked using the central locking button (driver's door closed) and extinguishes when one of the doors is unlocked or opened.

### IDENTIFICATION OF THIS SYSTEM

To check that the vehicle is fitted with a single decoder unit (**SAFRANE**):

- with the ignition off, press the central door locking button for more than **5 seconds** :
  - if the red immobiliser warning light illuminates (for approximately **15 seconds**), it is in fact a single decoder unit,
  - if the red immobiliser warning light continues to flash there are 2 separate decoder units (See Technical Note **NT 2624A**).

Once the check has been carried out press the central door locking button once to return to normal mode.

**NOTE** : On these vehicles, the identification number of the key heads consists of **eight characters** starting with:

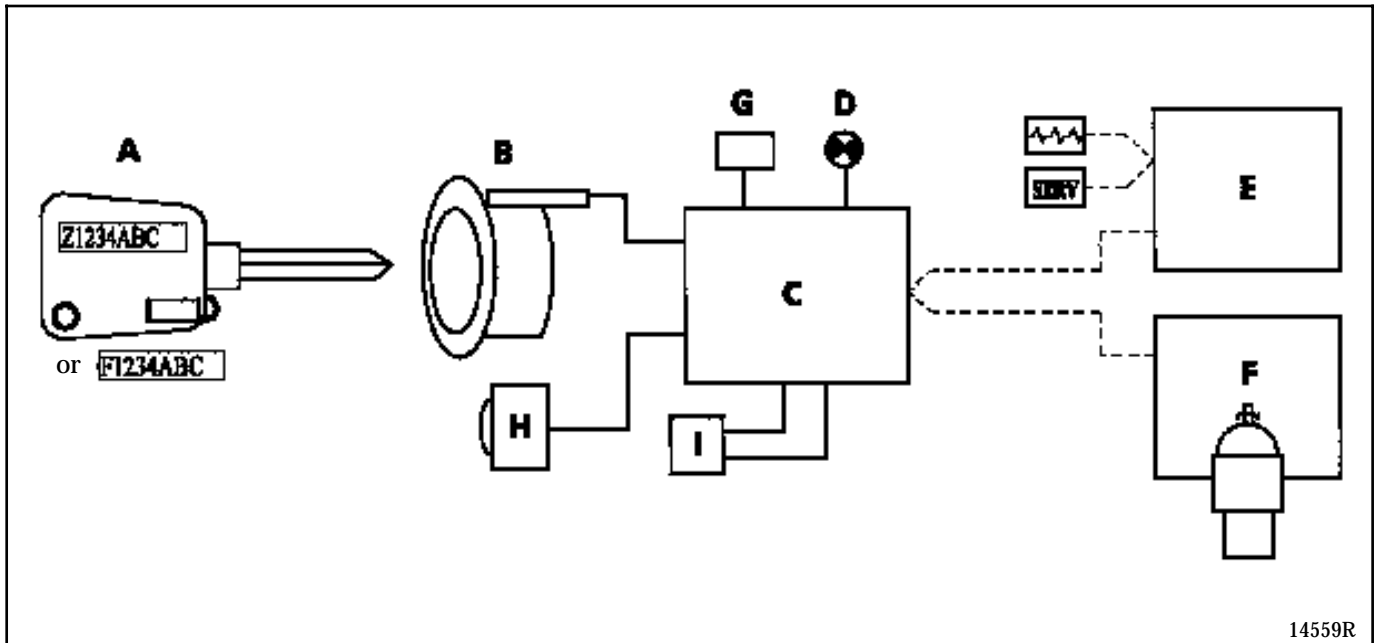
- the letter **Z** for infrared PLIPs (key identical to the double decoder unit system),
- with the letter **F** for radio frequency PLIPs).

Using the **XR25** and diagnostic fiche **No. 56** (ISO selector on **S8**), enter the code **D56**:

- bargraph **1 RH** should illuminate,
- bargraph **2 LH** indicates the configuration of the decoder unit (**IR** or **RF**).

**IMPORTANT**: only units part number **77 00 421 261** can be configured for radio frequency; in the future, only these units will be available as replacement parts (see configuration).

### PRESENTATION OF THE SYSTEM



14559R

- A Dual function key (immobiliser+ infrared or radio frequency PLIP)
- B Immobiliser antenna ring
- C Decoder unit
- D Red immobiliser warning light
- E Injection computer (petrol or diesel direct injection)
- F Diesel coded solenoid valve (except direct injection)
- G Central door locking button (CPE)
- H Infrared or radio frequency receiver
- I Diagnostic socket

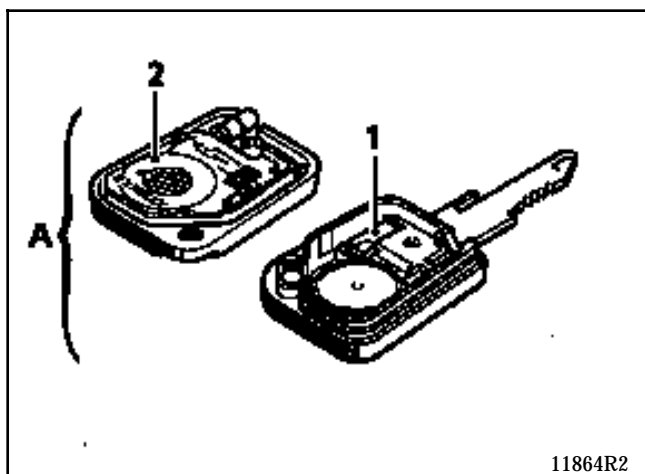
### DESCRIPTION OF THE SYSTEM

For this system, the engine immobiliser is activated approximately **10 seconds** after the ignition is turned off (indicated by flashing of the red immobiliser warning light).

The system comprises :

- Two special matched dual function key heads (A) equipped with :
  - a coded electronic chip enabling the engine immobiliser to be controlled (1),
  - the PLIP (infrared or radio frequency) electronic chip (2) enabling the central door locking system, the timed courtesy light and the setting and release of the alarm to be controlled.

Example : Infrared PLIP



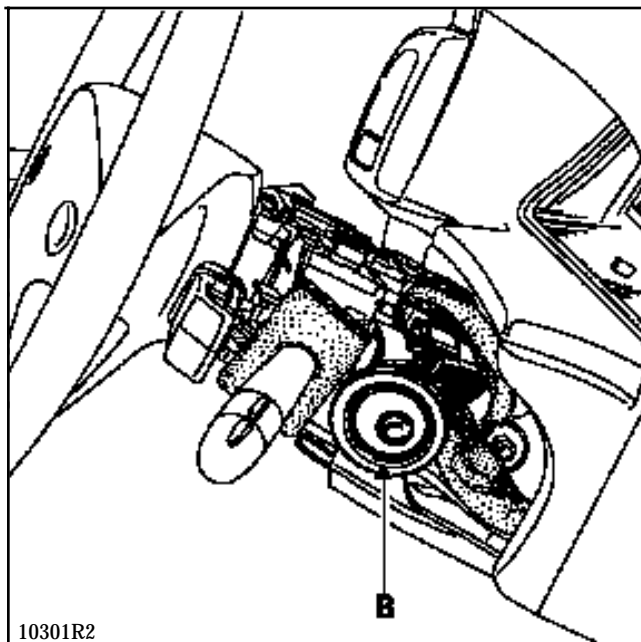
- An antenna ring (B) located around the ignition switch, equipped with an electronic chip which transmits the key code to the decoder unit (C).

**NOTE :** This antenna ring is not coded.

**IMPORTANT:** Do not force the ring or its connector when removing or refitting the two half cowlings to avoid damaging the coil wires.

Damage to these wires will result in the key not being detected when the ignition is turned on.

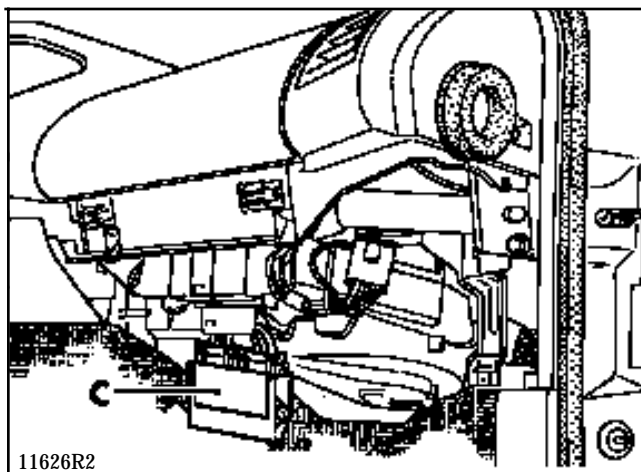
Example : LAGUNA



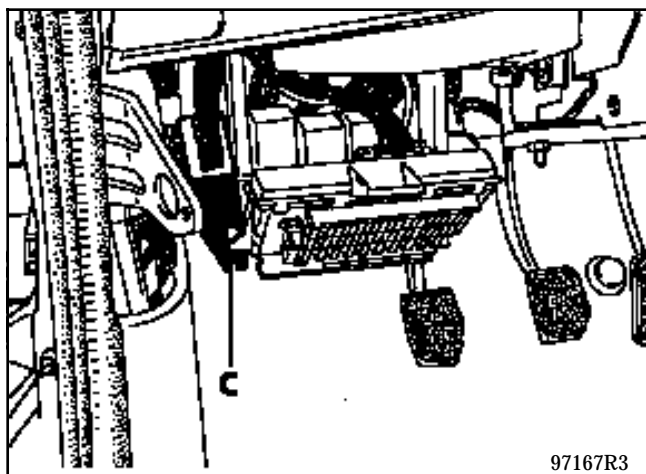
### Special note on alarm (first assembly)

If the vehicle is unlocked by the door lock (example: PLIP does not operate), the alarm may be turned off by the key detection system when the ignition is turned on, depending on alarm fitted (UK).

- A decoder unit (C) located :
  - underneath the dashboard on the passenger side on the **SAFRANE**,



- on the passenger compartment connection box side of the **LAGUNA**.



It ensures the following functions:

- the decoding of the key signal from the ring,
- the management of the engine immobiliser system by the sending of a code to the injection computer (petrol or diesel direct injection) or diesel coded solenoid valve (except direct injection) to authorise the vehicle to be started,
- controlling of the red immobiliser warning light,
- the central door locking,
- the timed courtesy light,
- setting and turning off the alarm function,
- management of the automatic window raising system (on high specification **LAGUNA** vehicles equipped with this system only).

### Special notes on the new decoder unit (77 00 421 261)

With this new decoder unit:

- it is no longer possible to lock the doors using the PLIP if the driver's door is open (1st notch switch information),
  - the central door locking button is inhibited when the doors are locked using the PLIP,
  - it is no longer possible to enter the emergency code by means of the central door locking button (by means of the **XR25** only),
  - locking of the doors using the PLIP is displayed by two flashes of the hazard warning lights while unlocking of the doors is displayed by one flash of the hazard warning lights (**SAFRANE** according to wiring and **LAGUNA Phase 2**),
  - a door locking warning light (on the central door locking button) flashes when the doors are locked (on **LAGUNA Phase 2** only).
- A red immobiliser warning light (D) located on the instrument panel or on the central door locking button (depending on vehicle), used for :
    - signalling the activation of the engine immobiliser system ,
    - entering the emergency code manually (except for vehicles equipped with the new decoder unit **77 00 421 261**),
    - signalling a fault in the system for vehicles equipped with a diesel coded solenoid valve (except direct injection) or non recognition of the key,
    - signalling entry into PLIP resynchronisation mode.

- An injection computer (E) (petrol or diesel direct injection) fitted with an injection and/or service warning light enabling the following faults to be indicated:
  - injection fault,
  - fault in the engine immobiliser system whilst the engine is running (flashes on deceleration and at idle speed).
- A diesel coded solenoid valve (F) (except direct injection).
- A central door locking button (G) which also enables the emergency code to be entered (except on vehicles equipped with the new decoder unit **77 00 421 261**).
- An infrared or radio frequency receiver (H) enabling the door locking/unlocking signal to be transmitted from the PLIP to the decoder unit.
- A diagnostic socket (I) used for repairing the system.

### OPERATION

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

After turning the ignition on, the antenna ring analyses the code from the key and transmits it to the decoder unit.

If the code is recognised by the decoder unit, it sends a code to the injection computer (petrol or diesel direct injection) or diesel coded solenoid valve (except direct injection) 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 (depending on equipment) has no reference code in its memory :
  - The code sent to it is stored in its memory.
- The injection computer or coded solenoid valve (depending on equipment) 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 system or the coded solenoid valve (depending on equipment) and the engine may be started. When the ignition is turned on the injection and/or service warning light (petrol or diesel direct injection) and the immobiliser warning light illuminate for a few seconds and then extinguish, showing that the system is operating correctly.
  - If the two codes do not match, the system remains locked to prevent the engine from being started. When the ignition is turned on, the injection and/or service warning light (petrol or diesel direct injection) illuminates for a few seconds and is then extinguished, whilst the red engine immobiliser warning light flashes (rapid flashing), or the injection and/or service warning light flashes (petrol or diesel direct injection) whilst the red engine immobiliser warning light illuminates and is then extinguished. The vehicle may not be started.

**NOTE :** to ensure the system operates correctly, no objects (eg. : keyrings) should be allowed to come between the key and the ring.

**IMPORTANT:** When the vehicle battery has a low charge, the drop in voltage caused by operating the starter may set 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 Z for infrared PLIPs or F for radio frequency PLIPs), and proceed to resynchronise the PLIP.
- If the customer requires the fault to be repaired immediately (2nd key unavailable) it will be necessary to replace the decoder unit plus two key heads (see **replacing a complete kit**).

The key has been lost :

- Order a replacement key head using the number in the key head of the 2nd key (eight alphanumeric characters starting with the letter Z for infrared PLIPs or F for radio frequency PLIPs) or on the bar code label normally attached to the keys when the vehicle is delivered.

In this case, remember to order the metal number insert for the new key head.

**IMPORTANT:** Do not touch the key head chip when taking note of the number in the key head. Any key which has been touched must be replaced.

**NOTE:** if the key head number cannot be located (both keys lost together with the bar code label), the complete kit must be replaced (decoder unit, two transmitters and the injection computer or coded solenoid valve electronic unit).

**NOTE:** the door locking system cannot operate with three PLIPs (the decoder unit can only manage two different rolling codes).

### RESYNCHRONISATION PROCEDURE

This procedure will be used to replace a transmitter or when the transmitter code is no longer within the reception range of the decoder unit (over 1,000 consecutive presses out of range of the receiver) in the vehicle.

This enables the two transmitters to be resynchronised with the decoder unit (rolling code).

**SPECIAL NOTE:** With this new unit it is not always necessary to resynchronise the 2nd transmitter.

If this is carried out with a single transmitter, check that the second transmitter is operating. If it is not, repeat one complete resynchronisation with the two transmitters.

Ignition turned off :

1. Press the central door locking button for more than **5 seconds** (the doors are locked and unlocked).

From this moment onwards the operator has **15 seconds** to carry out the following two operations.

**NOTE:** The **15 seconds** may be displayed by illumination of the red engine immobiliser warning light and by bargraph **17 LH** of the XR25 (code **D56**, fiche N° **56**).

2. Press the first transmitter once (the doors are locked or unlocked).
3. Press the second transmitter once (the doors are locked or unlocked).

**Special note on the infrared PLIP:** To ensure that the code is correctly transmitted it is essential that the transmitter is directed toward the receiver. If the procedure fails it will be necessary to restart from the beginning.

4. Once the procedure is completed check that the central door locking system is operating correctly.

**NOTE:** refer to the special notes on operation of the door locking of the new decoder units part number: **77 00 421 261**, page 2.

### REPLACING THE DECODER UNIT ALONE

A new decoder unit is not coded. Once fitted to the vehicle, the codes of both keys must be programmed so that it is operational (see programming procedure).

**IMPORTANT** : if the customer has not left the second key, the decoder unit may be programmed using just one key and the **XR25**.

Before carrying out the programming procedure:

- Connect the **XR25** to the vehicle
- Set the selector switch to **S8** and enter code **D56**
- When the ignition is turned off, enter **G31\*1\*** and proceed with programming using one key (the bargraph **3 LH** extinguishes).

**NOTE** : if the decoder unit alone is replaced, no operation is carried out on the injection computer or coded solenoid valve. It retains the same engine immobiliser code.

**IMPORTANT**: when a decoder unit has been programmed with the key code, the code cannot be erased and no other code may be memorised in its place.

### CONFIGURATIONS

With the **XR25** connected, **ISO** selector on **S8**, code **D56**, fiche n° **56**.

#### • **PLIPs**

When a new decoder unit is fitted (part number: **77 00 421 261**), it is necessary to check the configuration of the PLIP:

- **Infrared PLIP**: bargraph **2 LH** should be illuminated. If it is not, enter command **G48\*1\***, the bargraph should illuminate. The unit will then be configured to infrared.
- **Radio frequency PLIP**: bargraph **2 LH** should be extinguished. If it is not, enter command **G48\*2\***, the bargraph should extinguish. The unit will then be configured to radio frequency.

#### • **Engine**

When a decoder unit is fitted, it is necessary to check the configuration of the engine:

- **On diesel vehicles with a coded solenoid valve**, bargraph **3 RH** should be illuminated. If it is not, enter command **G22\*2\***, bargraph **3 RH** should illuminate. The unit will then be configured to diesel with coded solenoid valve. The decoder unit will then be able to check that the coded solenoid valve is operating correctly (displayed by the engine immobiliser warning light).
- **On petrol or diesel vehicles with direct injection**, bargraph **3 RH** should be extinguished. If it is not, enter command **G22\*1\***, bargraph **3 RH** should extinguish. The unit will then be configured to petrol, enabling correct operation of the red engine immobiliser warning light.

### DECODER UNIT PROGRAMMING PROCEDURE

This procedure may only be carried out once by the decoder unit. Until this procedure has been carried out, the vehicle cannot be started.

**NOTE:** Where programming is impossible, check the antenna ring/key decoder unit connection and visually inspect the ring (see "**Fault finding**"). If the coil wires are damaged it will be necessary to replace the ring.

The procedure may be carried out :

- With both keys if a kit is being replaced (which permits 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 if the decoder unit alone is being replaced, using the **XR25** (where the customer has not left both keys with the workshop).

The **XR25** may be used for this procedure but is not vital (except for programming using a single key, see "**Replacement of the decoder unit alone**").

1. Connect the **XR25** to the vehicle, set the selector to **S8** and enter code **D56** (fault finding fiche No. **56**); bargraphs **17 right hand and 19 left hand** should be illuminated (programming not carried out).
2. Using the first key, turn the ignition on for approximately **2 seconds** (but do not start the engine). Bargraphs **18 right and left hand** illuminate. From this moment you have **4 minutes** to carry out the following operation (except for programming a single key only). Turn the ignition off.

3. With the 2nd key, turn the ignition on for approximately **2 seconds** (but do not start the engine). Bargraphs **18 RH and LH and 19 LH** extinguish. The red engine immobiliser warning light flashes rapidly.
4. Turn the ignition off and on for a few seconds (without starting the engine). This will send the code to the injection computer or coded solenoid valve.
5. Check the engine immobiliser system is operating correctly:
  - ignition off, the red immobiliser warning light should flash (slow flashing). Bargraph **10 left hand side** should be illuminated. The vehicle should not be able to be started using other keys.

**NOTE :** To simulate prevention from starting, before turning the ignition on, wait for the red warning light to start flashing slowly. Enter **G04\***, with the ignition still turned off (the bargraph **9 left hand side** illuminates).

Turn the ignition on, the red immobiliser warning light flashes more quickly, and the vehicle should be prevented from starting.

6. The procedure is complete. After turning the ignition off and on again (for more than **2 seconds**), check that the vehicle can be started.

**NOTE :** if the programming procedure fails, wait for bargraphs **18 left and right hand side** to extinguish before starting again to programme with both keys.
7. If necessary, configure the PLIPs and the engine (see configurations).

### Special notes on the PLIP

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

If the transponder key programming procedure (immobiliser function) has been carried out with **spare** keys, it will then be necessary to resynchronise them to render them operational.

If the programming procedure (immobiliser function) has been carried out with a single **original** key (by means of the command **G31\*1\***), only the PLIP for that key will be operational. To ensure that the 2nd PLIP is operational it will be necessary to resynchronise it.

If the programming procedure (immobiliser function) has been carried out with a single **spare** key (by means of the command **G31\*1\***), it will be necessary to resynchronise the PLIP to render it operational.

To ensure that the 2nd PLIP is operational, it will be necessary to resynchronise it.

Check the operation of the PLIP or PLIPs after programming (the bargraphs **17 left and right hand side** should extinguish).

### REPLACING A COMPLETE KIT

(decoder unit and two key heads)

If a kit is replaced it will be necessary to:

- Programme the codes of the 2 new keys in the new decoder unit (supplied uncoded).
- Erase the old code in the injection computer or coded solenoid valve electronic unit using the emergency procedure (the code number for the old kit should be requested from the local assistance network, for example **Delta Assistance** for France). (I.N.V.S.R. by fax in the UK.)

**IMPORTANT:** When requesting the code it will be necessary to specify that it is the engine immobiliser code (emergency code).

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

The code in the injection computer or coded solenoid valve electronic unit cannot be erased with the emergency code (using the number for the old kit) unless the decoder unit fitted to the vehicle has been programmed with a different code (which is the case in the following procedure).

**NOTE :** if the emergency code is entered when the decoder unit has the same code as the injection computer, or 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 keys to obtain the emergency code number.
3. Remove the decoder unit (ignition off).
4. Fit the new decoder unit (ignition off).
5. Connect the **XR25**, set the selector switch to **S8** and enter code **D56**, bargraphs **17 right hand and 19 left hand side** must be illuminated (programming not carried out).
6. Turn ignition on (but do not start the engine) with the 1st key (for approximately **2 seconds**). The bargraphs **18 right and left hand side** illuminate. From this moment you have **4 minutes** to carry out the next operation. Turn the ignition off.
7. With the 2nd key, turn the ignition on for approximately **2 seconds** (but do not start the engine). The bargraphs **18 right and left hand and 19 left hand side** are extinguished. The red warning light flashes quickly.
8. Turn the ignition off and on for a few seconds and check that the warning light is illuminated and then extinguishes.
9. Turn the ignition off and on for more than **10 consecutive seconds**.
10. Turn the ignition off and wait until the red warning light starts flashing slowly. Enter the command **G04\***, ignition still turned off (the bargraph **9 left hand** is illuminated).

Turn the ignition on, the red immobiliser warning light flashes more quickly.

Then follow the procedure for entering the emergency code (operations **3, 4, 5** and **6** of the emergency code entering procedure) using the code number corresponding to the old kit. This will enable the old code in the solenoid valve electronic unit or in the injection computer to be erased.

**IMPORTANT;** If the emergency code from the old kit is entered using the **XR25**, it is normal that, when it is validated, the **XR25** display shows "**fin**".

The decoder unit fitted does not correspond to this code.

Ignore this display and check that the vehicle can be started. If the vehicle cannot be started, check the code and start the procedure again.

**NOTE:** on **petrol or diesel direct injection vehicles**, using the **XR25**, it is possible to check that the injection computer has in fact been decoded (in injection fault finding).

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

Petrol vehicle:

Bargraph **2 right hand side** (immobiliser) should be illuminated and after entering **\*22**, the text "**2def**" should appear on the **XR25** display. The erasure is then complete.

Diesel vehicles with direct injection:

Bargraph **15 left hand side** (immobiliser) should be illuminated and after entering **\*22**, the text "**2def**" should appear on the **XR25** display. The erasure is then complete.

- If the display indicates "**1def**", this indicates a fault on the coded line. In this case, repair and restart the procedure.
- If bargraph **2 RH** or **15 LH** depending on the engine (immobiliser) is extinguished and the display indicates "**bon**" (**\*22** or **\*15** depending on the 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.

11. Turn the ignition off and on again for a few seconds without starting the engine in order 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 must illuminate for **3 seconds** then extinguish.

**NOTE :**

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

Petrol vehicle:

Bargraph **2 right hand side** (immobiliser) must be extinguished, and after **\*22** is entered the **XR25** display must indicate "**bon**". The injection computer coding is complete. If the display indicates "**2def**" the injection computer has not yet been coded.

Diesel vehicle with direct injection:

Bargraph **15 left hand side** (immobiliser) must be extinguished, and after **\*15** is entered the **XR25** display must 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 coded solenoid valve**, when the ignition is turned on, check that the immobiliser warning light is extinguished after **3 seconds**.
12. Check that the system is operating correctly. Turn the ignition on and check that the red warning light illuminates for **3 seconds** and is then extinguished, and that the vehicle starts.

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

- Turn the ignition off, wait for the warning light to flash (slow flashing) and enter **G04\***.
- Turn the ignition on and check that the vehicle cannot be started and that the warning light is flashing (quick flashing).

13. The procedure is complete. After turning the ignition off and on again (for more than **2 seconds**), check that the vehicle can be started.

**NOTE :** if the programming procedure fails, wait for bargraphs **18 left and right hand side** to extinguish before starting again to programme with both keys.

14. If necessary, configure the PLIPs and the engine (see configuration).

**NOTE:** see special notes on PLIPs, (end of section "**Decoder unit programming procedure**").

### REPLACING THE INJECTION COMPUTER (petrol and diesel direct injection 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: All LAGUNA vehicles fitted with the F9Q and L7X engines and all petrol SAFRANE vehicles have a specific injection computer which only operates if it has been coded.**

It is sufficient to carry out the following operations:

- turn the ignition on using the vehicle's coded key for a few seconds,
- turn the ignition off, the immobiliser will be activated approximately **10 seconds** afterwards (immobiliser warning light flashes).

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

- With the ignition off, wait until the red warning light starts flashing slowly. Enter the command **G04\***, ignition still turned off (the bargraph **9 left hand side** illuminates).
- Turn the ignition on, the red immobiliser warning light flashes more rapidly and it should not be possible to start the vehicle.

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

For the operation for the removal/refitting of the screening providing access to the coded solenoid valve and the electrical stop, refer to the technical notes which correspond to the generation of vehicle (N.T. **2568A**, **2717A**).

The electronic unit of the solenoid valve is supplied uncoded. It will therefore be necessary to programme the immobiliser system code into it when it is fitted to authorise starting.

It is sufficient to carry out the following operations:

- Turn the ignition on using the vehicle's coded key for a few seconds.
- Turn the ignition off, the immobiliser will be activated approximately **10 seconds** afterwards (immobiliser warning light flashes).

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

- Ignition off, wait until the red engine immobiliser warning light starts flashing slowly. Enter the command **G04\***, ignition still off (bargraph **9 left hand side** illuminated).
- When the ignition is turned on the red immobiliser warning light flashes more rapidly and the vehicle should not be able to be started.

### SPECIAL NOTES FOR TESTING AN INJECTION COMPUTER (test part)

#### IMPORTANT

**LAGUNA** vehicles equipped with **F9Q** and **L7X** engines and all petrol **SAFRANE** vehicles have a specific injection computer which only operates if it is coded.

Consequently it is strongly recommended that these tests are not carried out on a computer borrowed from the warehouse or from another vehicle in order to avoid coding and decoding procedures which would risk rendering them useless afterwards.

### CHECK

In injection fault finding, it is possible to ascertain the status of the computer.

Connect the **XR25** to the vehicle and enter the code which corresponds to the type of injection.

- If the injection computer is not coded.

Petrol vehicle:

bargraph **2 RH** (immobiliser) should be illuminated and after entering **\*22**, the text "**2def**" should appear on the **XR25** display.

Diesel vehicle with direct injection:

bargraph **15 LH** (immobiliser) should be illuminated and after entering **\*15**, the text "**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** should be extinguished and after entering **\*22**, the text "**bon**" should appear on the **XR25** display (even if the computer coding does not correspond to the vehicle).

Diesel vehicle with direct injection:

bargraph **15 LH** should be extinguished and after entering **\*15**, the text "**bon**" should appear on the **XR25** display (even if the computer coding does not correspond to the vehicle).

**NOTE:** if the injection computer has detected a fault on the coded line, the text "**1def**" will appear on the **XR25** display after entering **\*22** or **\*15** depending on the engine (bargraph **2 RH** or **15 LH** should illuminate depending on the engine). In this case, repair the fault and clear it using command **G0\*\*** or by disconnecting the battery.

### DECODING PROCEDURE

If an injection computer has been programmed with a code and the computer has to be fitted to another vehicle or returned to stock, it is **essential** to decode it before removing it.

The decoding procedure consists of replacing the decoder unit on the vehicle with another decoder unit with a different code and entering the emergency code for the vehicle (emergency code number should be requested from the local assistance network, example **DELTA Assistance** for France) using the number in the head of the key for the vehicle.

1. Ignition off, fit in place of the original decoder unit on the vehicle a decoder unit coded with a different number (the procedure will not work with an uncoded decoder unit or one which has the same code as the injection computer).
2. Turn the ignition on, the red engine immobiliser warning light will flash (rapid flashing).
3. Enter the vehicle emergency code (number corresponding to the original key number).
4. After entering the emergency code, the red engine immobiliser warning light will flash again. On the **XR25** "**2def**" must then appear on the display (in injection fault finding **\*22** or **\*15** depending on engine). This indicates that the injection computer has been decoded.

**Computer with the same characteristics taken from another vehicle equipped with the same engine** (if available).

To avoid injection computer coding and decoding procedures it will be simpler to take from another vehicle with the same characteristics:

- its injection computer,
- its decoder unit,
- its key head.

After the test refit the parts described above to their original vehicle.



### SPECIAL NOTES FOR TESTING A CODED SOLENOID VALVE (test part)

#### IMPORTANT

If a test is being carried out on the electronic unit of an uncoded solenoid valve taken from stock (test part), it is **ESSENTIAL** that the decoder unit is not supplied with power during the operation.

In fact, if power is supplied to the decoder unit turning on the ignition will cause the decoder unit to transmit a coded signal to the electronic unit of the solenoid valve (the code is then programmed).

To avoid memorising a code which could disable the electronic unit of the coded solenoid valve after testing, it is necessary to remove the fuse (+before ignition) from the decoder unit (central locking fuse). Thus the coded signal will not be transmitted when the ignition is turned on (the electronic unit of the solenoid valve will therefore remain uncoded).

### SYSTEM FAULT, ENGINE RUNNING

#### Petrol or diesel direct injection vehicles

If a fault in the system is noted by the injection computer when the engine is running, the injection and/or service warning light on the instrument panel will flash during deceleration and at idle speed (engine speed less than **1500 rpm**).

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

If you disconnect the battery, ensure you have the radio code.

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

Connect the **XR25** and enter the injection code.

#### Petrol vehicles

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

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

#### Diesel vehicles with direct injection

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

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

#### Diesel vehicles with a coded solenoid valve

If a system fault is detected by the decoder unit when the engine is running, the red immobiliser warning light will illuminate permanently until the ignition is turned off.

**IMPORTANT:** In this case, after repair, the fault memorised in the decoder unit must be erased by entering **G0\*\*** on the **XR25** or by disconnecting the battery (approximately **30 seconds**) to allow the engine immobiliser system to operate again.

**NOTE:** This fault may be shown by the **XR25** and by the fault finding for the decoder unit (fiche **No. 56**).

Connect the **XR25**.

Set the ISO selector to **S8** and enter the code **D56**.

The fault may be shown by bargraph **6 LH or RH side**.

### PROCEDURE FOR ENTERING THE EMERGENCY CODE

With this immobiliser system, the procedure for entering the emergency code is managed by the decoder unit.

The code is entered

- using the **XR25** (all versions),
- using the central door locking button and the red engine immobiliser warning light (decoder unit part number **77 00 416 293** only).

The emergency code can only be entered if the engine immobiliser system is set on. The red immobiliser warning light must flash when the ignition is turned on (rapid flashing).

**IMPORTANT :** When a request for the emergency code is made to the local assistance network (example **Delta Assistance** for France), it will be necessary to specify that you need the immobiliser emergency code.

#### Using the XR25

After obtaining the emergency code number, carry out the following operations:

1. With the ignition off, the red engine immobiliser warning light should flash (slow flashing).
2. Turn on the ignition, the injection and/or service warning light (petrol or diesel vehicles with direct injection) illuminates for approximately **3 seconds** then extinguishes while the red engine immobiliser warning light flashes more quickly.
3. Connect the **XR25** to the vehicle, position the selector on **S8** and enter code **D56**. Bargraph **10 LH** should be illuminated (diagnostic fiche n° **56**).

4. Enter command **G40\*** on the **XR25** keypad then the emergency code number and validate using button **"\*"**.
  - If the code is correct, **"bon"** is displayed on the **XR25** and bargraph **10 LH** extinguishes.
  - If the code is not correct, **"fin"** is displayed on the **XR25** and bargraph **10 LH** remains illuminated.

#### Using the central door locking button

**IMPORTANT:** This method does not work on all vehicles. It is only possible on vehicles equipped with the old assembly decoder unit part number: **77 00 416 293**. On other vehicles, use the **XR25**.

After determining the emergency code number carry out the following operations:

1. Ignition off, the red engine immobiliser warning light must flash (slow flashing).
2. Turn on the ignition, the injection warning light (petrol or diesel direct injection vehicles) will illuminate for approximately **3 seconds** then extinguish, whilst the red engine immobiliser warning light will flash more quickly.
3. Press and hold the central door locking button (it does not matter which side), the red warning light extinguishes.
4. Without releasing the central door locking 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 key when the value of the 1st figure of the emergency code is reached.
5. Press the central 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 emergency code is reached.
6. Repeat operation "5" to enter the two remaining emergency code figures.

After entering the 4th figure of the emergency 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**, then illuminate for approximately **30 seconds**.

This warning light illumination cycle will repeat whenever the ignition is turned on and as long as the vehicle is unprotected (up to approximately **10 minutes** after the ignition is turned 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 turned off (automatic setting on),
- after disconnection of the battery.

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

The red immobiliser warning light and the injection and/or service warning light flash.

Turn the ignition off then repeat the procedure for entering the emergency code.

**IMPORTANT:** you may make 3 attempts to enter the code. If, after the third attempt, the code is invalid, you must wait for approximately **5 minutes** with the ignition on before making another attempt.

When this period has expired, turn the ignition off and on again and 3 more attempts may be made.

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

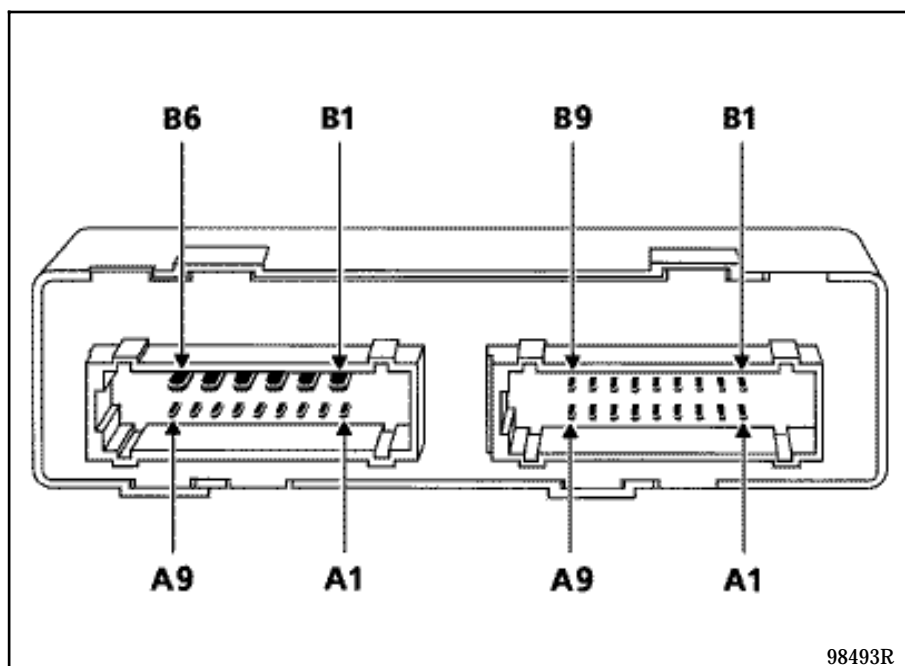
**REMINDER:** The ignition must be turned off and on again between two code tests.

# IMMOBILISER

## Single decoder unit

82

### DECODER UNIT CONNECTION



98493R

#### 15 track connector

Track	Allocation
A1	+ after ignition feed
A2	Door opening information
A3	Door closing information
A4	Red immobiliser warning light
A5	Diagnostic socket information (line L)
A6	Antenna ring/decoder unit coded line
A7	Antenna ring interrogation
A8	Antenna ring earth
A9	Antenna ring feed
B1	Door closing
B2	Coded information to injection computer or electronic unit of coded solenoid valve
B3	Door opening
B4	Diagnostic socket information (line K)
B5	+ before ignition feed
B6	Earth

#### 18 track connector

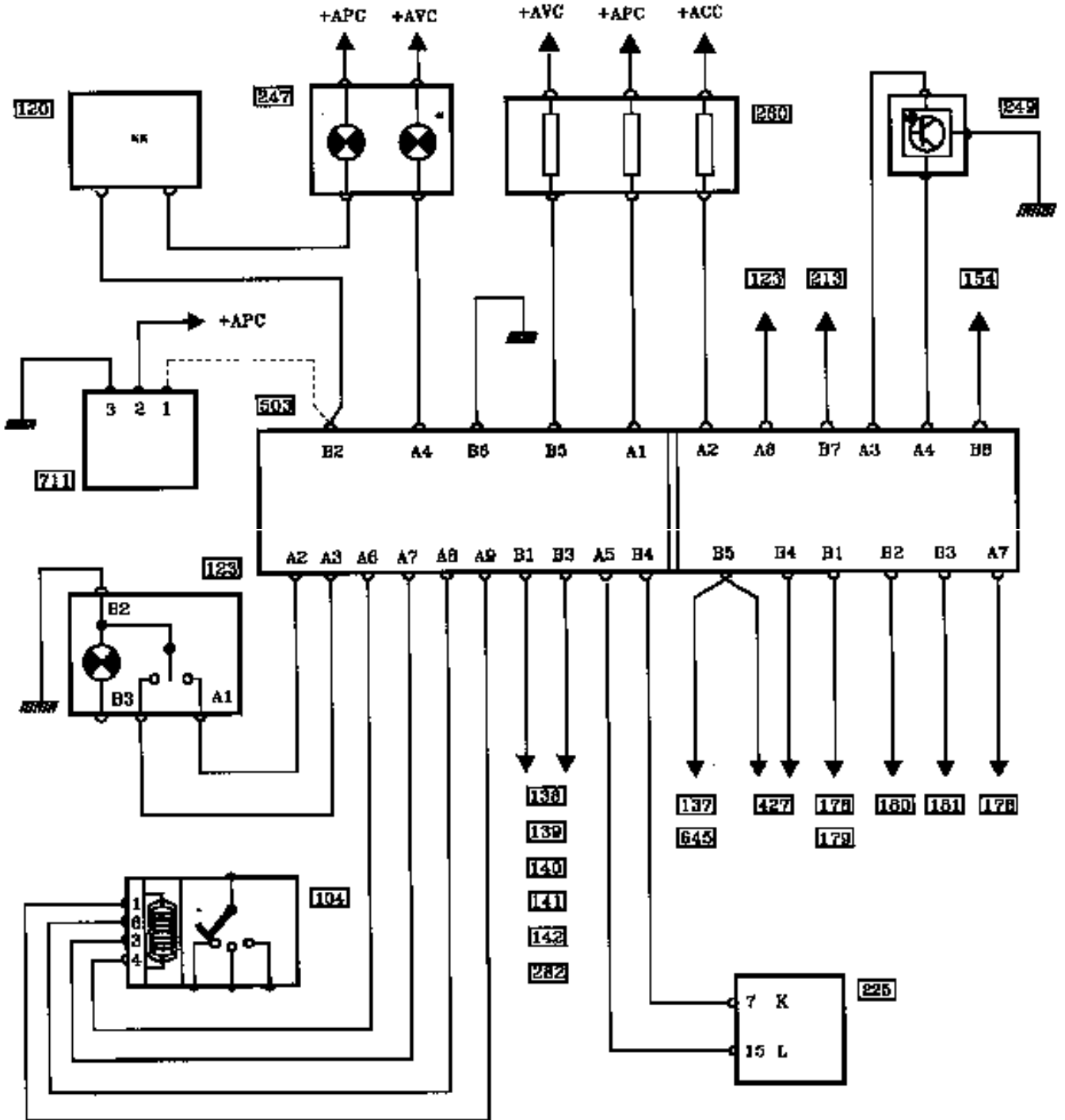
Track	Allocation
A1	Not used
A2	+ Accessories
A3	Infrared or radio frequency input
A4	Infrared or radio frequency receiver feed
A5	Electric window raise*
A6	Electric window refeed*
A7	Right rear door switch*
A8	Red door locking warning light (LAGUNA Phase 2)
A9	Not used
B1	Rear door switches or left rear only*
B2	Left front door switch
B3	Right front door switch
B4	Door opening/alarm information + direction indicators*
B5	Door closing/alarm information*
B6	Not used
B7	Timed illumination/courtesy light
B8	Boot switch
B9	Not used

\* Depending on equipment or wiring

# IMMOBILISER

## Single decoder unit

DIAGRAM



14558R

\* Red engine immobiliser warning light located on the instrument panel or on the central door locking button depending on the vehicle.

\*\* For the allocation of injection computer tracks, see the relevant wiring diagrams technical note.

### KEY

104	Ignition switch
120	Injection computer
123	Central door locking button
137	Direction indicators unit ( <b>SAFRANE</b> depending on wiring)
138	Right rear door locking motor
139	Left rear door locking motor
140	Driver's door locking motor
141	Passenger door locking motor
142	Tailgate locking motor
154	Boot switch (depending on wiring)
178	Right rear door switch (see notes)
179	Left rear door switch (see notes)
180	Driver's door switch
181	Passenger door switch
213	Courtesy light
225	Diagnostic socket
247	Injection and/or service warning light on the instrument panel
249	Infrared or radio frequency transmitter
260	Passenger compartment fuse box
282	Fuel filler flap locking motor
427	Alarm unit (depending on equipment)
503	Decoder unit
645	Passenger compartment connection box ( <b>LAGUNA Phase 2</b> )
711	Coded solenoid valve (diesel except direct injection)

### NOTES:

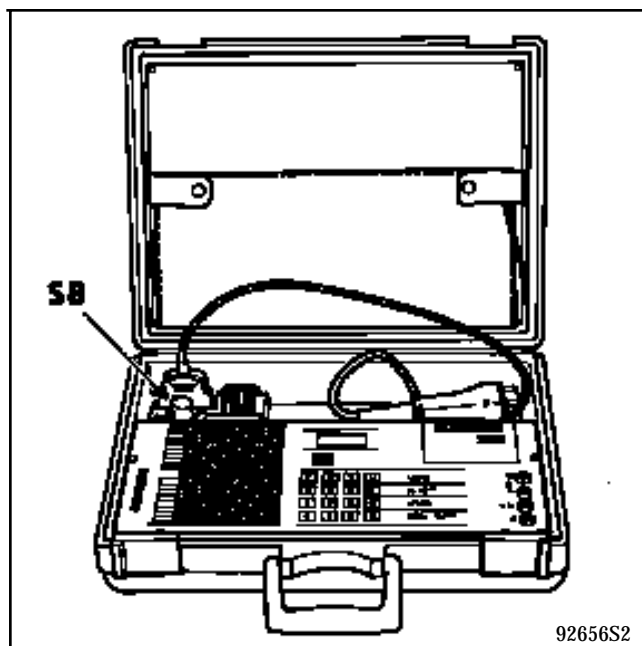
- Vehicles fitted with door sill switches have the right and left rear door switch information on the same track of the decoder unit (track **B1**).
- Vehicles without door sill switches (first notch switch only) have separate right and left rear door switch information (left track **B1**, right track **A7**).

### FAULT FINDING

If this immobiliser system is faulty, fault finding may be carried out using the **XR25**.

### CONNECTION

Use cassette **No. 16** (and upwards) and fault finding fiche **No. 56**.



Connect the XR25 to the diagnostic socket.

Position the ISO selector on **S8**.

Enter the code specific to the system **D56**.

### FAULT FINDING - INTRODUCTION

#### INITIALISING XR25 / DECODER UNIT DIALOGUE

- Connect the XR25 to the diagnostic socket.
- ISO selector on **S8**
- Enter **D56**

n.56

#### PRECAUTION :

When carrying out tests using a multimeter, avoid using connectors where the test pin is of a size which could damage the clips and cause poor contact.

**Take note of the key head part numbers**

#### ERASING THE MEMORY

After repairing the immobiliser system, enter G0\*\* on the XR25 keypad to erase the fault stored.

### FAULT FINDING - ADVICE

#### - Resynchronisation of the keys:

Press the central door locking button for a few seconds until the engine immobiliser warning light illuminates and the door lock motors are activated.

Check that bargraphs 14 LH, 14 RH, 17 LH, 17 RH are illuminated for a few seconds. Press the key once; the doors open and close. Check bargraphs 14 LH, 14 RH, 17 LH, 17 RH again.

Resynchronisation is complete.



# IMMOBILISER

## Single decoder unit

# 82

FAULT FINDING - XR25 FICHE


FICHE N° 56

<b>N° 56</b>		<b>S8</b>	code : <b>D 5 6</b>	read : <b>n56</b>
1	<input type="checkbox"/>	possible check on other side of fiche (x65)		CODE PRESENT <input type="checkbox"/>
2	<input type="checkbox"/>	TYPE OF PLIP	<input type="checkbox"/> IR <input type="checkbox"/> RF	COMPUTER CONFIGURATION (fixed display)
3	<input type="checkbox"/>	PROGRAMMING	1 key <input type="checkbox"/> 2 keys <input type="checkbox"/>	INTERIOR LIGHT TIMER <input type="checkbox"/>
4	<input checked="" type="checkbox"/>	+ ACCESSOIRES PRESENT		DIESEL CODED SOL VALVE <input type="checkbox"/>
5	<input type="checkbox"/>	ELECTRIC DOOR LOCK BUTTON (CPE)		+ APC PRESENT <input type="checkbox"/>
6	<input type="checkbox"/>	DIESEL SOL ACQUITTAL		FAULTS
7	<input type="checkbox"/>	KEY INTERROGATION (CC) (only if valeo unit)		CODED LINE * 26 <input type="checkbox"/>
8	<input checked="" type="checkbox"/>	RE-READ DIESEL ACQ	KEY PRESENT <input type="checkbox"/>	CONNEC. RING/DE CODER * 27 <input type="checkbox"/>
9	<input type="checkbox"/>	PROTECTED MODE ENFORCED	RECVD (key code) <input type="checkbox"/>	CONTROL MODES : G...+
10	<input type="checkbox"/>	IMMOBILISER ACTIVE	VALID <input type="checkbox"/>	23 Diesel sol. mechanical control Only if line 3 RH and line 6 RH/LH <input type="checkbox"/>
<b>IMMOBILISER (PLIP and KEY)</b>				Test: Switch off ignition, enter G23*: Switch ign. on again, valve opens and closes for 30 secs (audible check)
To read other side : G 02 * Erase memory : G 0 **				03 Interior light control 08 Opening movement 09 Closing movement 15 Raising : electric window
11	<input checked="" type="checkbox"/>	ACTIVATE PLIP (UNLOCKING) SIGNAL RECVD	SIGNAL CORRECT <input type="checkbox"/>	04 Protected mode enforced
12	<input type="checkbox"/>	INT. LIGHT CUT-OUT PRESENT USING PLIP (option depending on equip.)		40*xxxxx* security entry code
13	<input checked="" type="checkbox"/>	ACTIVATE PLIP (signal) UNLOCKING	LOCKING <input checked="" type="checkbox"/>	Part No : G70 *
14	<input checked="" type="checkbox"/>	* 14 PRESS BUTTON : CPE UNLOCKING(1)	LOCKING(0)	MOTOR ACTION LOCKING(!) UNLOCKING(!) * 34 <input checked="" type="checkbox"/>
15	<input checked="" type="checkbox"/>	AUTHORISED	ELECTRIC WINDOW (PLIP) (witch anti-pinch)	WINDOW CLOSING <input checked="" type="checkbox"/>
16	<input checked="" type="checkbox"/>	DOOR SWITCHES (ILLUM. IF DOOR OPEN)		
17	<input type="checkbox"/>	PROGRAMMING OR RESYNCHRO IN PROGRESS	PLIP	NOT PROGRAMMED <input type="checkbox"/>
18	<input type="checkbox"/>	PROGRAMMING 1st KEY	KEY	PROGRAMMING AUTHORISED <input type="checkbox"/>
19	<input type="checkbox"/>	NOT PROGRAMMED		PROGRAMMING NOT LOCKED (G60*) <input type="checkbox"/>
20	<input type="checkbox"/>			TIMED DELAY SECURITY CODE ENTRY <input type="checkbox"/>
SEE REPAIR MANUAL				<b>18</b> ANG


FI21856

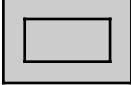
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### REPRESENTATION OF THE BARGRAPHS

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

### REPRESENTATION OF A FAULT (always on a coloured background)

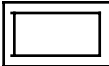
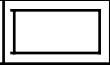



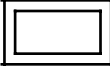

-  Illuminated, there is a fault on the product tested. The associated text defines the fault.

-  Extinguished, a fault has not been detected on the product tested.

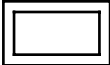

### REPRESENTATION OF A STATUS (always on a white background)

#### Engine stopped, ignition on, no operator action

The status bargraphs on the fiche are represented in the condition they are in when the engine is stopped, the ignition is on and there is no operator action

- If on the fiche, the bargraph is shown as  the XR25 should show 
- If on the fiche, the bargraph is shown as  the XR25 should show 
- If on the fiche, the bargraph is shown as  the XR25 should show either  or 

#### Engine running


-  Extinguished when the function or condition on the fiche is no longer met.
-  Illuminated when the function or condition on the fiche is met.

# IMMOBILISER

## Single decoder unit

**82**

### FAULT FINDING - INTERPRETATION OF XR25 BARGRAPHS

<b>1</b> 	<b>Bargraph 1 RH side extinguished</b> <u>XR25 / DECODER UNIT COMMUNICATION</u>	Fiche n° 56
----------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------	-------------

<b>NOTES</b>	Check that lines K and L are not disrupted by another computer.
--------------	-----------------------------------------------------------------

Check the condition of the + before ignition feed fuse.

Replace the fuse if necessary.

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

Check that the ISO selector is in position **S8**, that the latest XR25 cassette is being used with the correct access code (**D 56**).

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

Check that the yellow decoder unit connector is correctly connected.

Check that the decoder unit is correctly fed:

- earth on **track B6 of the 15 track** decoder unit connector.
- + before ignition feed on **track B5 of the 15 track** decoder unit connector.

Ensure the diagnostic socket is correctly fed.

Check and ensure the continuity and insulation of the electrical wiring on **tracks A5 and B4 of the 15 track** decoder unit connector.

If there is still no dialogue between the XR25 and the decoder unit, replace the decoder unit.

<b>AFTER REPAIR</b>	When communication has been established, deal with any illuminated fault bargraphs. Carry out a conformity check.
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# IMMOBILISER

## Single decoder unit

**82**

### FAULT FINDING - INTERPRETATION OF XR25 BARGRAPHS

<b>3</b> 	<b>Bargraph 3 RH side incorrect illumination</b> <u>CODED DIESEL SOLENOID VALVE CONFIGURATION</u>	Fiche n° 56
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<b>NOTES</b>	None.
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Using the XR25, correctly reconfigure the decoder unit.

On the XR25 keypad, enter

**G22\*1\*** for a petrol or diesel direct injection vehicle

**G22\*2\*** for a diesel vehicle with a coded solenoid valve

**NOTE :** For the diesel version, an incorrect decoder unit configuration will not prevent the immobiliser operating correctly. If there is a fault, however, the immobiliser warning light will not illuminate.

<b>AFTER REPAIR</b>	Erase the fault stored by entering G0** on the XR25 keypad. Carry out a conformity check. Check that the engine immobiliser system operates correctly.
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# IMMOBILISER

## Single decoder unit

82

### FAULT FINDING - INTERPRETATION OF XR25 BARGRAPHS

<b>4</b> 	<b>Bargraph 4 RH side incorrect illumination</b> <u>+ AFTER IGNITION FEED PRESENT (+APC)</u>	Fiche n° 56
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<b>NOTES</b>	Reminder : in normal operation - <b>BG 4RH</b> illuminated, ignition key in + APC position - <b>BG 4RH</b> extinguished, ignition key in position other than + APC position
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Check the condition of the + after ignition feed fuse.

Replace the fuse if necessary.

Ignition on, check for + **12 volts on track A1 of the 15 track** decoder unit connector.

Is there 12 volts ?


YES	Replace the decoder unit.
-----	---------------------------

NO	Repair the electrical wiring between <b>track A1 of the 15 track</b> decoder unit connector and the passenger compartment fuse board.
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<b>AFTER REPAIR</b>	Carry out a conformity check. Check that the engine immobiliser system operates correctly.
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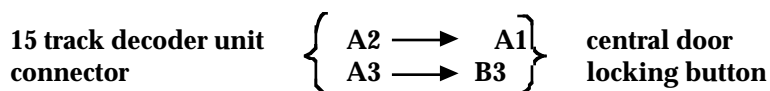
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### FAULT FINDING - INTERPRETATION OF XR25 BARGRAPHS

<p>5</p> 	<p><b>Bargraph 5 LH side illuminated</b> <span style="float: right;">Fiche n° 56</span></p> <p><u>CENTRAL DOOR LOCKING BUTTON (CPE)</u></p>
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<b>NOTES</b>	<p>Check that the central door locking button is not permanently depressed/engaged because of mechanical stress.</p>
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Check that there are no short circuits to earth on the electrical wiring between:



Repair if necessary.

If the fault persists, replace the "Central door locking button".


<b>AFTER REPAIR</b>	<p>Erase the fault stored by entering G0** on the XR25 keypad.          Carry out a conformity check.          Check that the engine immobiliser system operates correctly.</p>
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# IMMOBILISER

## Single decoder unit

**82**

### FAULT FINDING - INTERPRETATION OF XR25 BARGRAPHS

<b>6</b> 	<b>Bargraph 6 LH side illuminated</b> <u>DIESEL SOLENOID VALVE SIGNAL CLEARANCE</u>	Fiche n° 56
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<b>NOTES</b>	Check that the configuration of the computer is correct: <ul style="list-style-type: none"><li>- <b>diesel : bargraph 3 RH illuminated</b></li><li>- <b>petrol or diesel direct injection: bargraph 3 RH extinguished</b></li></ul>
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Set the XR25 to pulse detection (button "G", input using terminal "Vin").  
Ignition on, check for pulses on **track B2 of the 15 track** decoder unit connector (test with the decoder unit and solenoid valve coded electronic unit connectors connected).  
Ignition on, if there are no pulses, replace the decoder unit.

Turn the ignition on for longer than 30 consecutive seconds, then turn off the ignition and wait for the immobiliser warning light to flash (immobiliser active).  
Turn the ignition on again and check that bargraph 8 LH is permanently illuminated.  
Is bargraph 8 LH permanently illuminated?

YES	Replace the decoder unit.
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NO	Replace the solenoid valve coded electronic unit.
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<b>AFTER REPAIR</b>	Erase the fault stored by entering G0** on the XR25 keypad. Carry out a conformity check. Check that the engine immobiliser system operates correctly.
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# IMMOBILISER

## Single decoder unit

**82**

### FAULT FINDING - INTERPRETATION OF XR25 BARGRAPHS

<b>6</b> 	<b>Bargraphs 6 LH and 6 RH sides illuminated</b> <u>DIESEL SOLENOID VALVE AND CODED LINE CLEARANCE</u>	Fiche n° 56
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<b>NOTES</b>	Before beginning fault finding, turn the ignition on for longer than 30 consecutive seconds then turn it off again.
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For the diesel version, if **bargraphs 6 LH and 6 RH** are illuminated, check the impact switch.

Ensure that the solenoid valve coded electronic unit connector is correctly connected and check that the solenoid valve is fed with 12 volts.

Check the condition of the electrical wiring between track **B2 of the 15 track** decoder unit connector and **track 1 of the coded solenoid valve connector**.

Repair if necessary.

Set the XR25 to pulse detection (button "G", input using terminal "Vin").  
Ignition on, check for pulses on **track B2 of the 15 track** decoder unit connector (test with the decoder unit and solenoid valve coded electronic unit connectors connected).

Do you note any pulses?

YES

Replace the solenoid coded valve electronic unit.

NO

Replace the decoder unit.

**AFTER  
REPAIR**

Erase the fault stored by entering G0\*\* on the XR25 keypad.  
Carry out a conformity check.  
Check that the engine immobiliser system operates correctly.

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# IMMOBILISER

## Single decoder unit

82

### FAULT FINDING - INTERPRETATION OF XR25 BARGRAPHS

<p style="font-size: 1.5em;">6</p> 	<p><b>Bargraph 6 RH side illuminated</b></p> <p><u>CODED LINE</u></p>	<p>Fiche n° 56</p>
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<b>NOTES</b>	None.
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For the petrol version, if **bargraph 6 RH** is illuminated, check the impact switch.

Check the continuity and insulation from earth and from 12 Volts of the electrical wiring between **track B2 of the 15 track** decoder unit connector and **track \*\* on the injection computer**.

Repair the electrical wiring if necessary.

Set the XR25 to pulse detection (button "G", input using terminal "Vin").

Ignition on, check for pulses on **track B2 of the 15 track** decoder unit connector (test with the decoder unit and injection computer connectors connected).

Do you note any pulses?

YES	Replace the injection computer.
-----	---------------------------------

NO	Replace the decoder unit.
----	---------------------------

**\*\* track:** For the allocation of the tracks on the injection computer, refer to the relevant "Wiring diagrams" technical note.

<b>AFTER REPAIR</b>	<p>Erase the faults stored by entering G0** on the XR25 keypad.</p> <p>Carry out a conformity check.</p> <p>Check that the engine immobiliser system operates correctly.</p>
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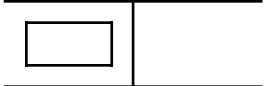


# IMMOBILISER

## Single decoder unit

82

### FAULT FINDING - INTERPRETATION OF XR25 BARGRAPHS

<p style="font-size: 1.5em;">11</p> 	<p><b>Bargraph 11 LH side remains extinguished after pressing the IR or RF (radio frequency) PLIP</b></p> <p style="text-align: right;">Fiche n° 56</p> <p><u>IR OR RF PLIP SIGNAL RECEIVED</u></p>
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<b>NOTES</b>	<p>If BG 17 RH is illuminated, do not apply the following fault finding as the multi-timer unit is blank. Carry out the key programming procedure. Only use the following fault finding if BG 11LH remains extinguished after attempting to lock or unlock the doors of the vehicle using the IR or RF PLIP.</p>
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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 first key still does not operate, replace it.

On the infrared or radio frequency transmitter connector, check for + 12 V before ignition feed between tracks :

4 and 3	}	on Laguna
5 and 3		
A1 and B1	}	on Safrane
A3 and B1		

Do you note this voltage?

YES	<p>Set the XR25 to pulse detection (button "G", input using terminal "Vin"). Check for pulses on <b>track A1 on Safrane or track 4 on Laguna</b> on the infrared or radio frequency transmitter when the IR or RF PLIP is pressed. Are there pulses when the IR or RF PLIP is pressed?</p>
YES	Replace the decoder unit.
NO	Replace the infrared or radio frequency transmitter.

NO	<p>Check on the 18 track decoder unit connector for 12 V between tracks :</p> <ul style="list-style-type: none"> <li>- <b>A3 and earth</b></li> <li>- <b>A4 and earth</b></li> </ul> <p>Do you note this voltage?</p>
YES	Repair the electrical wiring between the infrared or radio frequency transmitter and the 18 track connector.
NO	Replace the decoder unit.

<b>AFTER REPAIR</b>	<p>Carry out a conformity check. Check that the engine immobiliser system operates correctly.</p>
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# IMMOBILISER

## Single decoder unit

**82**

### FAULT FINDING - INTERPRETATION OF XR25 BARGRAPHS

<b>11</b> 	<b>Bargraph 11 RH side remains extinguished after pressing the IR or RF PLIP</b> <u>IR OR RF PLIP SIGNAL CORRECT</u>	Fiche n° 56
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<b>NOTES</b>	Only refer to the following fault finding if, when the IR or RF PLIP is pressed, BG 11 LH side illuminates for 3 seconds and BG 11RH side remains extinguished. Check that the keys belong to the vehicle.
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There is a desynchronisation between the IR or RF PLIP code and the decoder unit code, bargraph 11 RH side remains extinguished (while bargraph 11 LH side illuminates for approximately 3 seconds) and the vehicle doors cannot be locked or unlocked using the IR or RF PLIP.

Apply the procedure for resynchronising the keys.

<b>AFTER REPAIR</b>	Carry out a conformity check. Check that the engine immobiliser system operates correctly.
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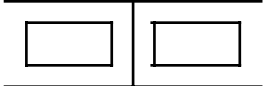
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# IMMOBILISER

## Single decoder unit

**82**

### FAULT FINDING - INTERPRETATION OF XR25 BARGRAPHS

<b>11</b> 	<b>Bargraph 11 LH side and 11 RH side remain extinguished</b> <span style="float: right;">Fiche n° 56</span>
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<b>NOTES</b>	Only refer to the following fault finding if, when the IR PLIP is pressed, <b>BG 11 LH side illuminates for 3 seconds and BG 11 RH side remains extinguished.</b> Check that the keys belong to the vehicle.
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Check that the PLIP indicator light illuminates when the PLIP is pressed.

Replace the battery if necessary and replace the PLIP if the fault persists.

Connect the XR25 in pulse generation mode (button "G", input using terminal "Vin") and check for a signal on **track A3** of the 18 track decoder unit connector.

Do you note a signal?

<b>YES</b>	Check the condition of the electrical wiring between <b>track A3</b> of the 18 track connector and <b>track A3 (Laguna) or 4 (Safrane)</b> of the IR or RF PLIP receiver. Repair it if necessary.
<b>NO</b>	Replace the IR or RF PLIP receiver.

<b>AFTER REPAIR</b>	Carry out a conformity check. Check that the engine immobiliser system operates correctly.
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# IMMOBILISER

## Single decoder unit

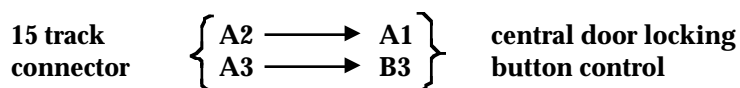
**82**

### FAULT FINDING - INTERPRETATION OF XR25 BARGRAPHS

<b>14</b> 	<b>Bargraph 14 LH side illuminated or extinguished after pressing the IR or RF PLIP</b>	Fiche n° 56
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<b>NOTES</b>	Bargraph 10 LH side should be illuminated.
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Check the continuity and insulation from 12 V and earth of the electrical wiring between:



Repair the electrical wiring if necessary or replace the switch.

If the fault persists, replace the decoder unit.

<b>AFTER REPAIR</b>	Erase the fault stored by entering G0** on the XR25 keypad. Carry out a conformity check. Check that the engine immobiliser system operates correctly.
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# IMMOBILISER

## Single decoder unit

82

### FAULT FINDING - CUSTOMER COMPLAINTS (petrol or diesel direct injection version)

<b>NOTES</b>	Only consult these customer complaints after a complete check using the XR 25
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<b>IGNITION ON, THE IMMOBILISER WARNING LIGHT FLASHES PERMANENTLY (starting is impossible)</b>	<b>Chart 1</b>
<b>THE IMMOBILISER WARNING LIGHT REMAINS PERMANENTLY ILLUMINATED (even with the ignition off) OR PERMANENTLY EXTINGUISHED</b>	<b>Chart 2</b>
<b>IGNITION ON, THE INJECTION WARNING LIGHT FLASHES PERMANENTLY (starting is impossible)</b>	<b>Chart 3</b>
<b>WHILE DRIVING (deceleration) AND AT IDLE SPEED, THE INJECTION WARNING LIGHT FLASHES PERMANENTLY</b>	<b>Chart 4</b>
<b>THE VEHICLE DOES NOT START</b>	<b>Chart 5</b>

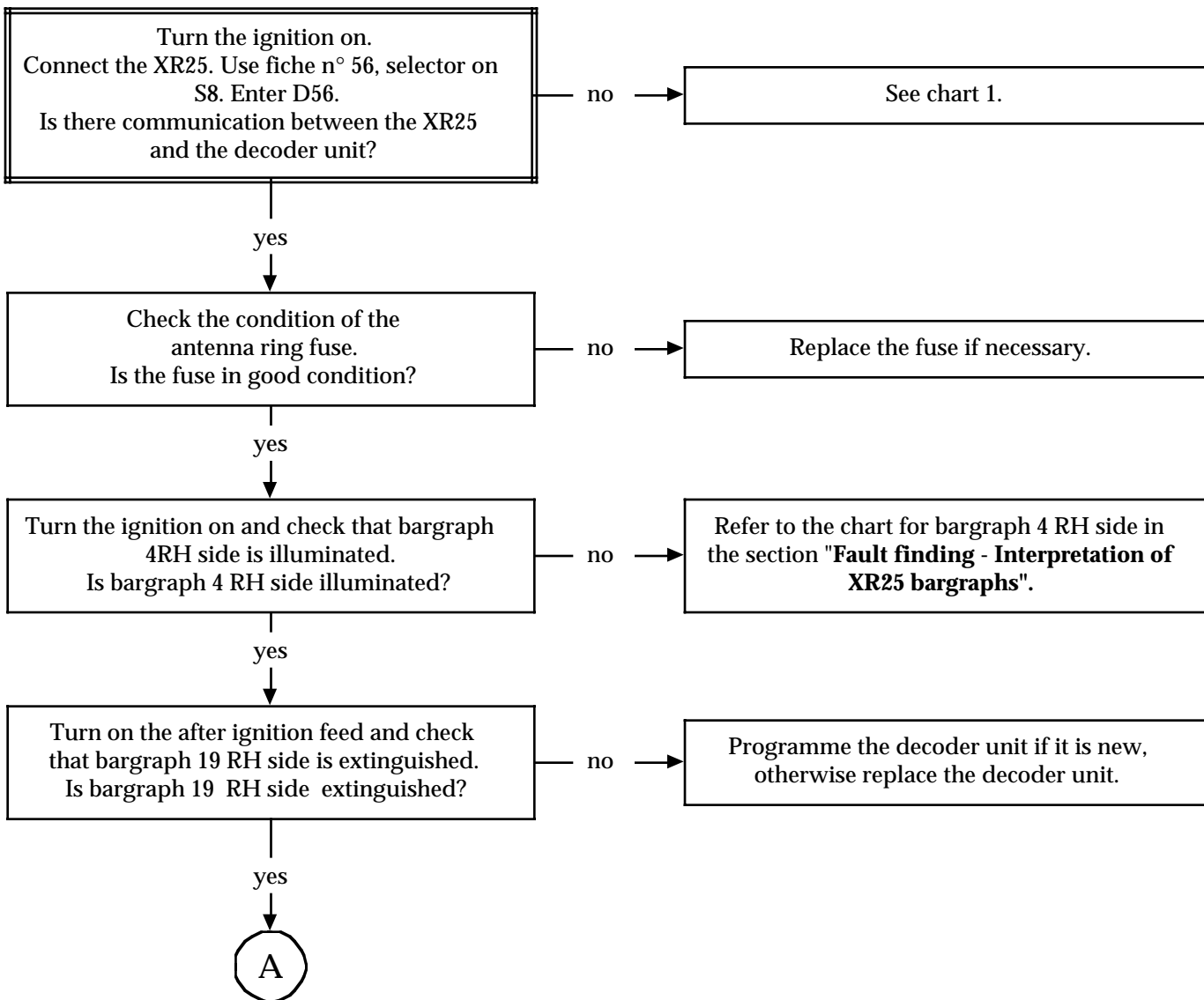
# IMMOBILISER

## Single decoder unit

82

### FAULT FINDING - FAULT CHARTS (petrol or diesel direct injection version)

<b>Chart 1</b>	<b>IGNITION ON, THE IMMOBILISER WARNING LIGHT FLASHES PERMANENTLY (starting is impossible)</b>
<b>NOTES</b>	None



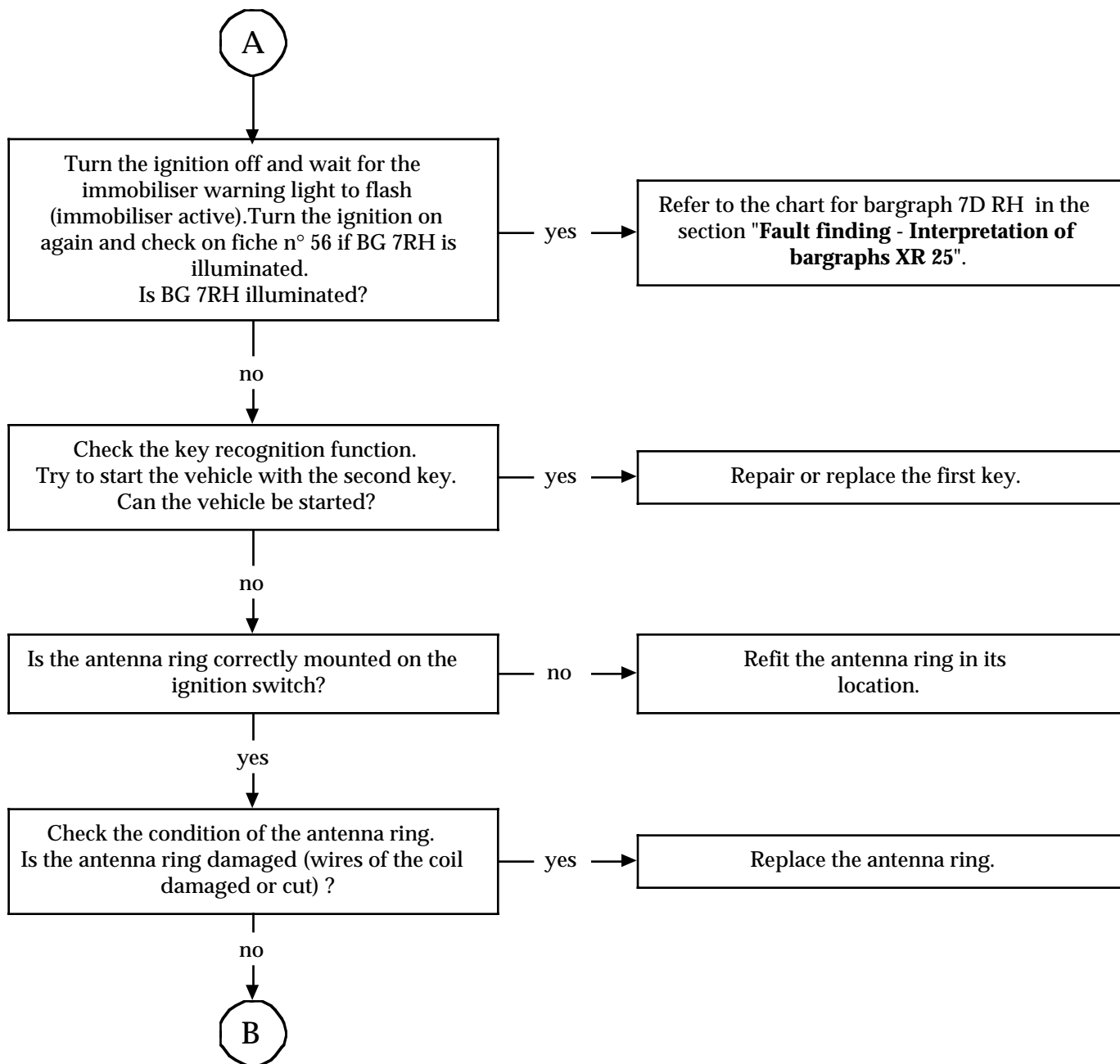
<b>AFTER REPAIR</b>	Carry out a conformity check. Check the immobiliser system is operating correctly. Erase the faults by entering G0**.
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### FAULT FINDING - FAULT CHARTS (petrol or diesel direct injection version)

<b>Chart 1</b> <b>CONT 1</b>	
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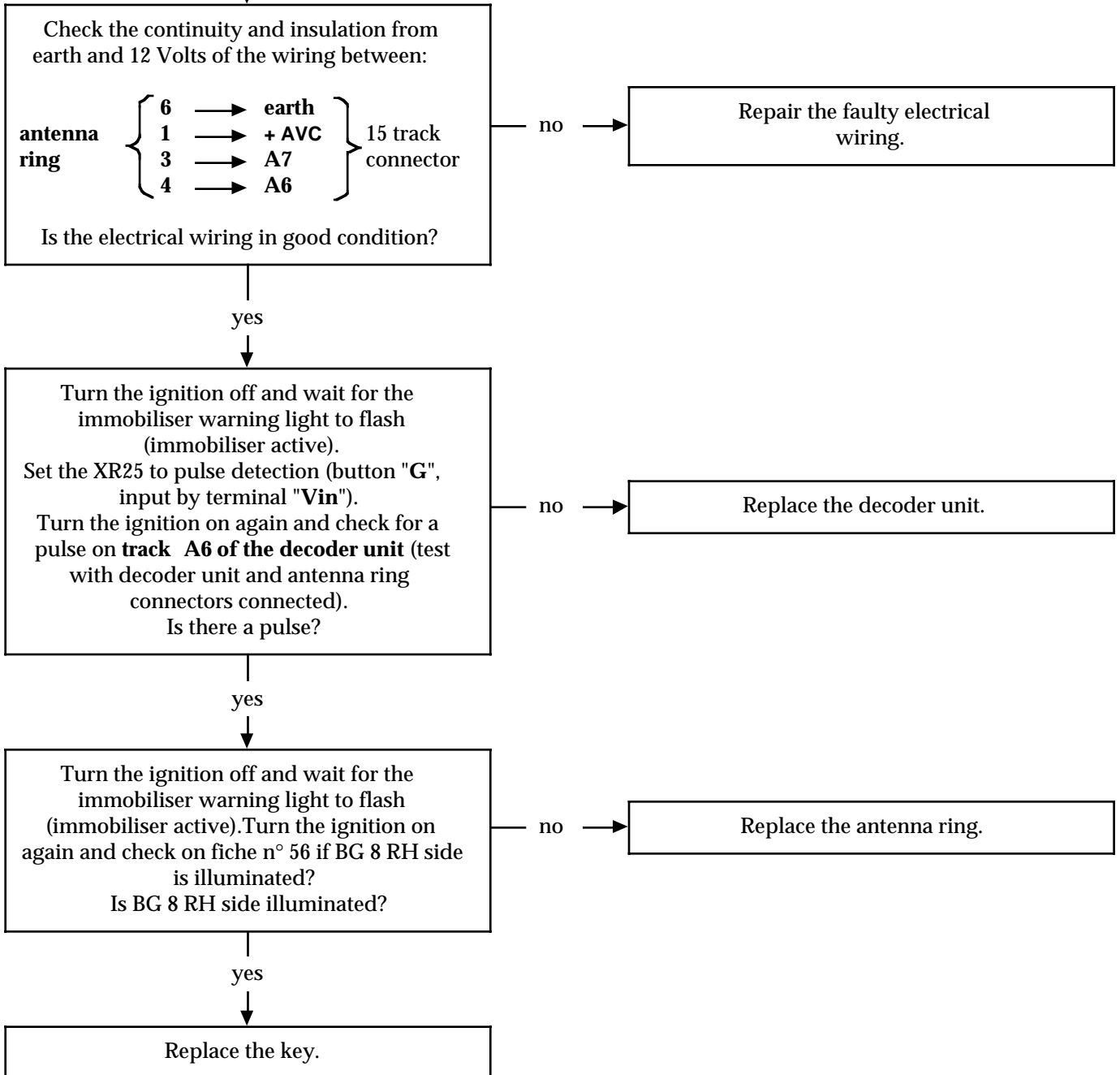


<b>AFTER REPAIR</b>	Carry out a conformity check. Check the immobiliser system is operating correctly.
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### FAULT FINDING - FAULT CHARTS (petrol or diesel direct injection version)

<b>Chart 1</b> <b>CONT 2</b>	
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B



<b>AFTER REPAIR</b>	Carry out a conformity check. Check the immobiliser system is operating correctly.
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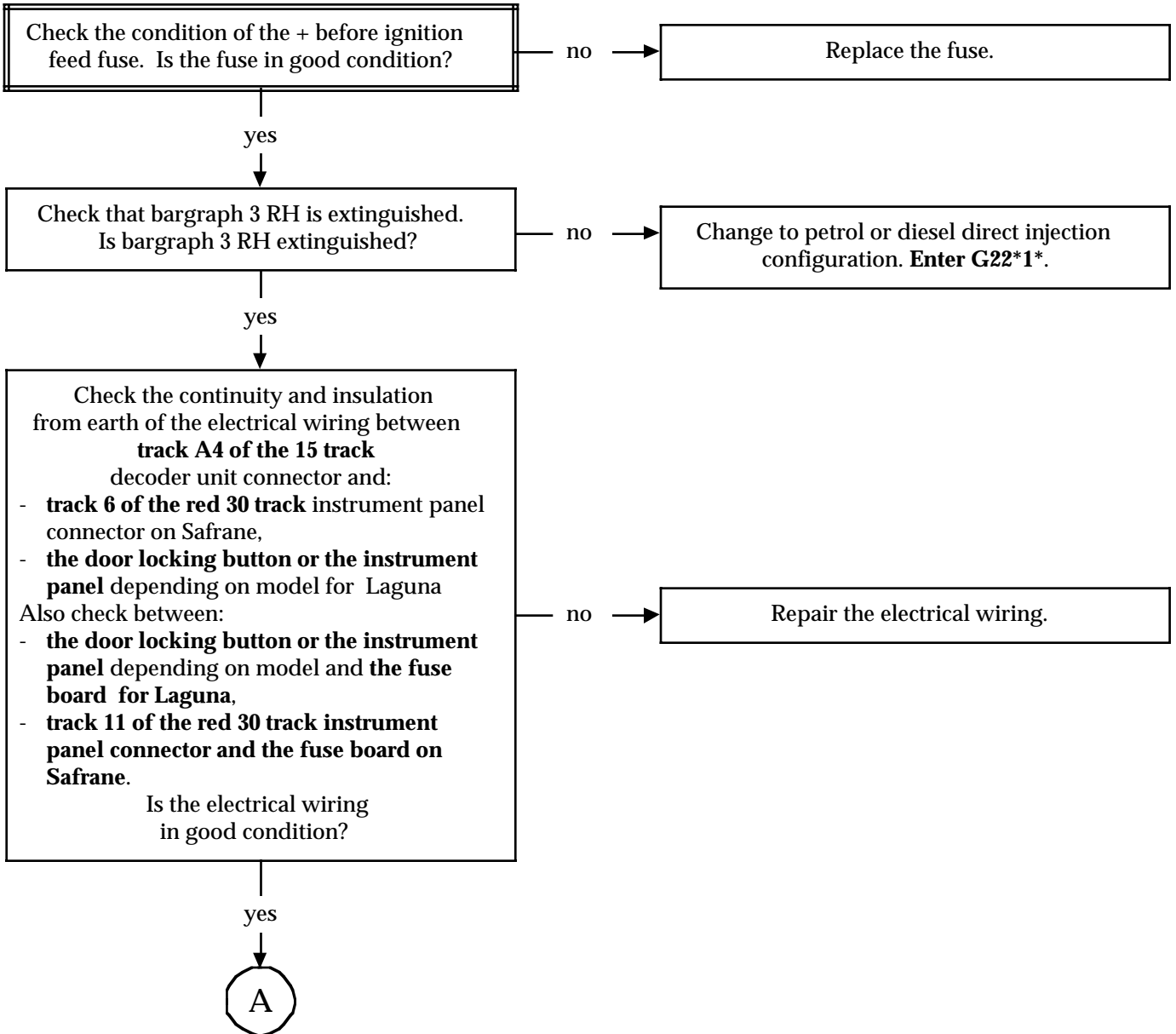
# IMMOBILISER

## Single decoder unit

82

### FAULT FINDING - FAULT CHARTS (petrol or diesel direct injection version)

<b>Chart 2</b>	<b>THE IMMOBILISER WARNING LIGHT REMAINS PERMANENTLY ILLUMINATED (even with the ignition off) OR PERMANENTLY EXTINGUISHED</b>
<b>NOTES</b>	Check that the decoder unit has been programmed.

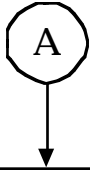


<b>AFTER REPAIR</b>	Carry out a conformity check. Check the immobiliser system is operating correctly. Erase the faults by entering G0**.
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### FAULT FINDING - FAULT CHARTS (petrol or diesel direct injection version)

**Chart 2**  
**CONT**



Carry out the following tests to determine which component is at fault:

- if the immobiliser warning light is permanently illuminated, disconnect the 15 track decoder unit connector and check that the immobiliser warning light extinguishes,
- if the immobiliser warning light is extinguished, connect **track A4 of the 15 track** decoder unit connector to a vehicle earth and check that the immobiliser warning light illuminates permanently.

Does the immobiliser warning light illuminate correctly during the test?

no

**On Safrane** : replace the instrument panel.  
**On Laguna** : replace the door locking button or the instrument panel depending on model.

yes

Replace the decoder unit.

**AFTER**  
**REPAIR**

Carry out a conformity check.  
Check the immobiliser system is operating correctly.

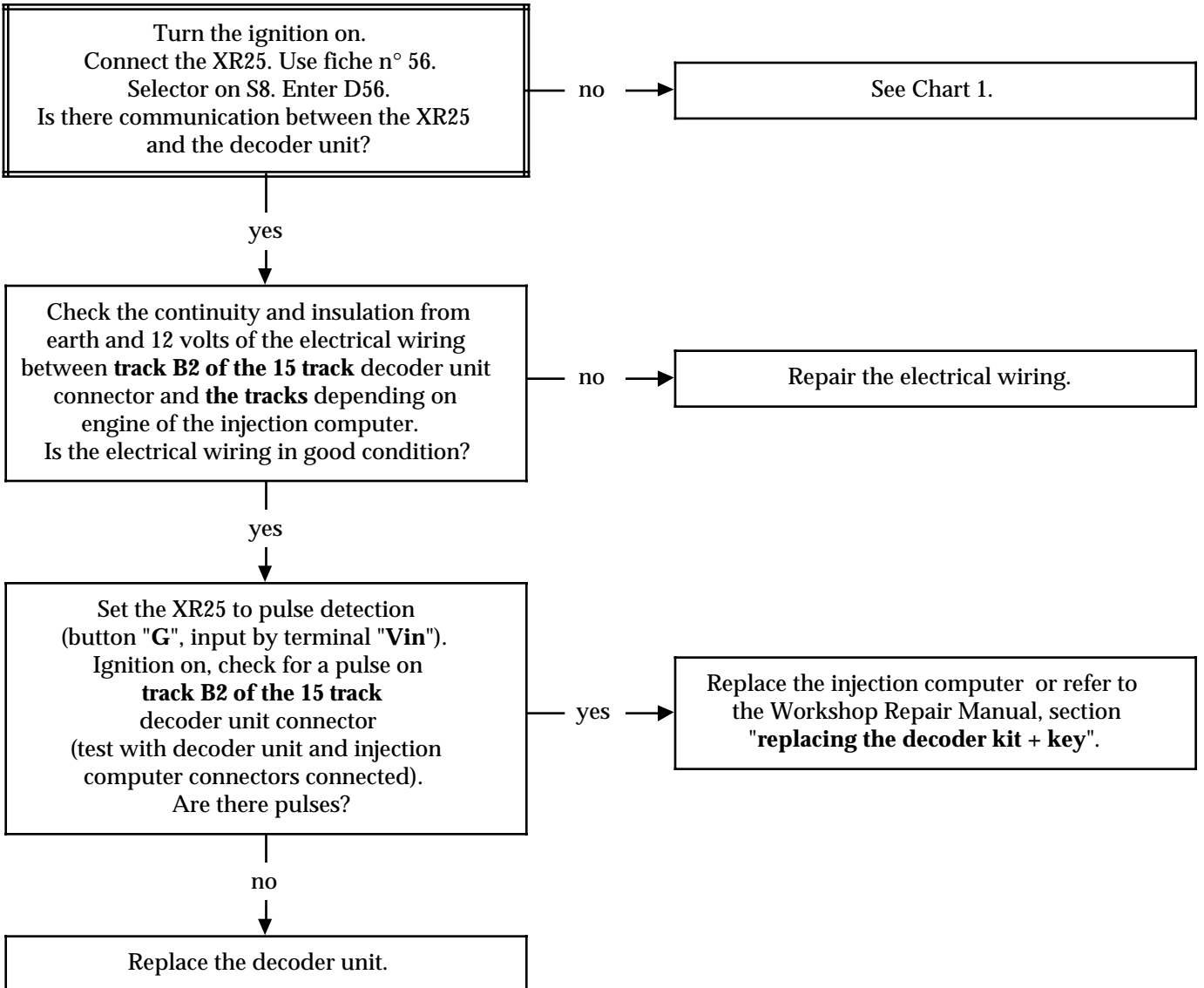
# IMMOBILISER

## Single decoder unit

82

### FAULT FINDING - FAULT CHARTS (petrol or diesel direct injection version)

<b>Chart 3</b>	<b>IGNITION ON, THE INJECTION WARNING LIGHT FLASHES PERMANENTLY (starting is impossible)</b>
<b>NOTES</b>	None

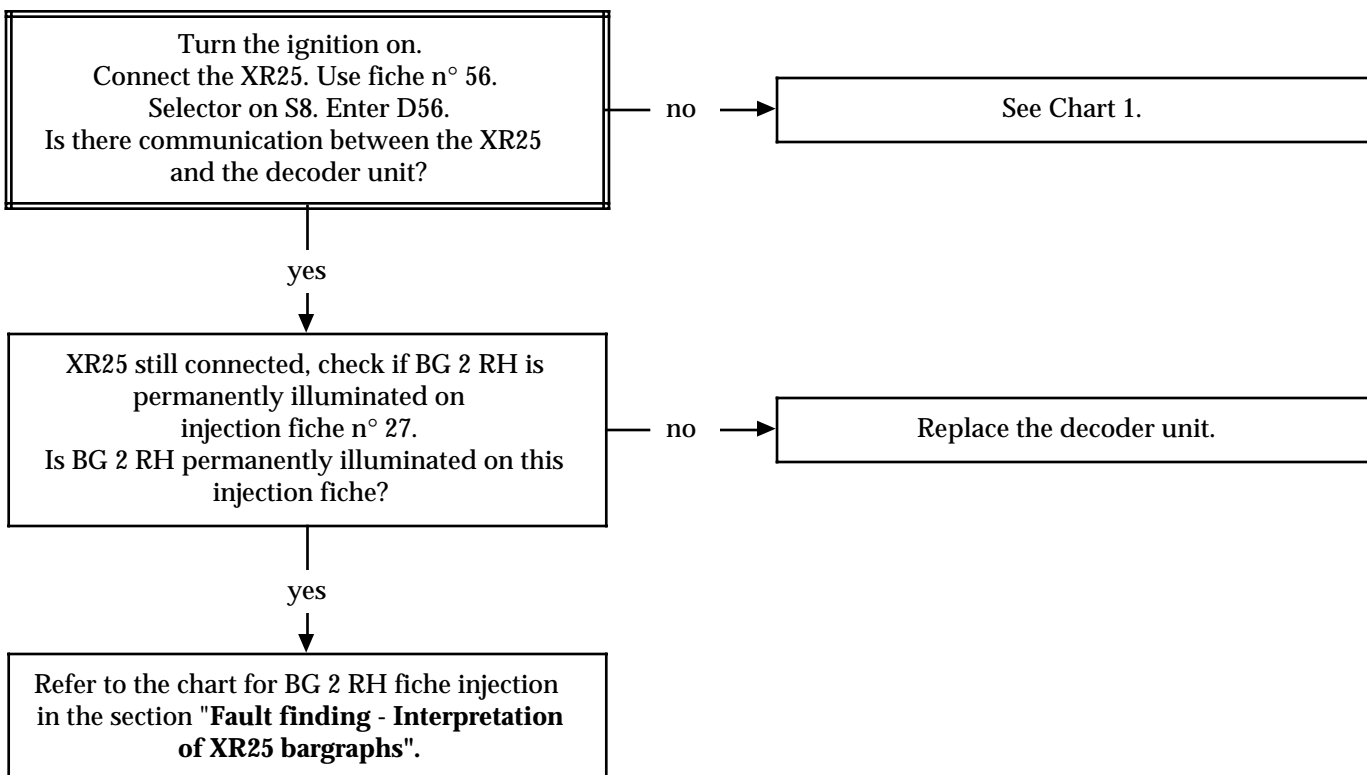


<b>AFTER REPAIR</b>	Carry out a conformity check. Check the immobiliser system is operating correctly. Erase the faults by entering G0**.
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### FAULT FINDING - FAULT CHARTS (petrol or diesel direct injection version)

<b>Chart 4</b>	<b>WHILE DRIVING (deceleration) AND AT IDLE SPEED, THE INJECTION WARNING LIGHT FLASHES PERMANENTLY</b>
<b>NOTES</b>	None



<b>AFTER REPAIR</b>	Carry out a conformity check. Check the immobiliser system is operating correctly.
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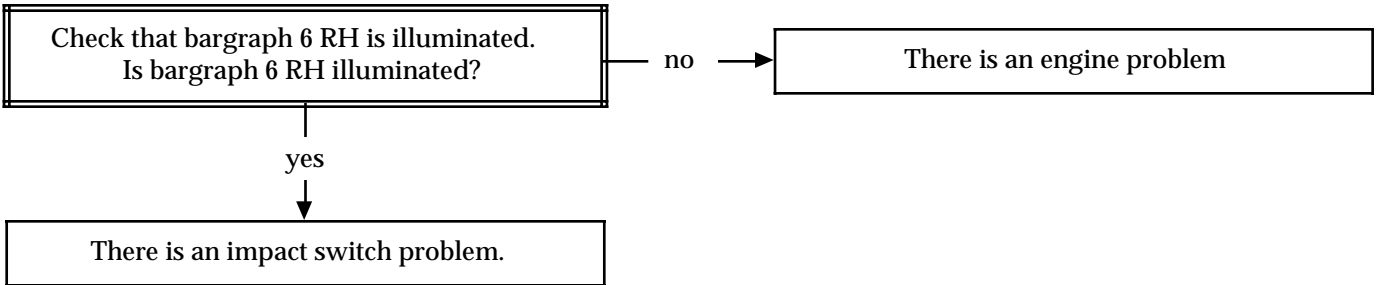
# IMMOBILISER

## Single decoder unit

82

### FAULT FINDING - FAULT CHARTS (petrol or diesel direct injection version)

<b>Chart 5</b>	<b>THE VEHICLE DOES NOT START</b>
<b>NOTES</b>	None



<b>AFTER REPAIR</b>	Carry out a conformity check. Check the immobiliser system is operating correctly. Erase the faults by entering G0**.
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# IMMOBILISER

## Single decoder unit

82

### FAULT FINDING - CUSTOMER COMPLAINTS (diesel version with coded solenoid valve)

<b>NOTES</b>	Only consult these customer complaints after a complete check using the XR 25
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**IGNITION ON, THE IMMOBILISER WARNING LIGHT FLASHES PERMANENTLY (starting is impossible)** **Chart 1**

**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 turned on, in the 16 seconds following turning on the ignition or the immobiliser warning light illuminates for more than 30 consecutive seconds)** **Chart 2**

**WHEN THE IGNITION IS TURNED ON, THE IMMOBILISER WARNING LIGHT ILLUMINATES FOR 3 SECONDS THEN EXTINGUISHES BUT THE VEHICLE CANNOT BE STARTED** **Chart 3**

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

**THE VEHICLE DOES NOT START** **Chart 5**



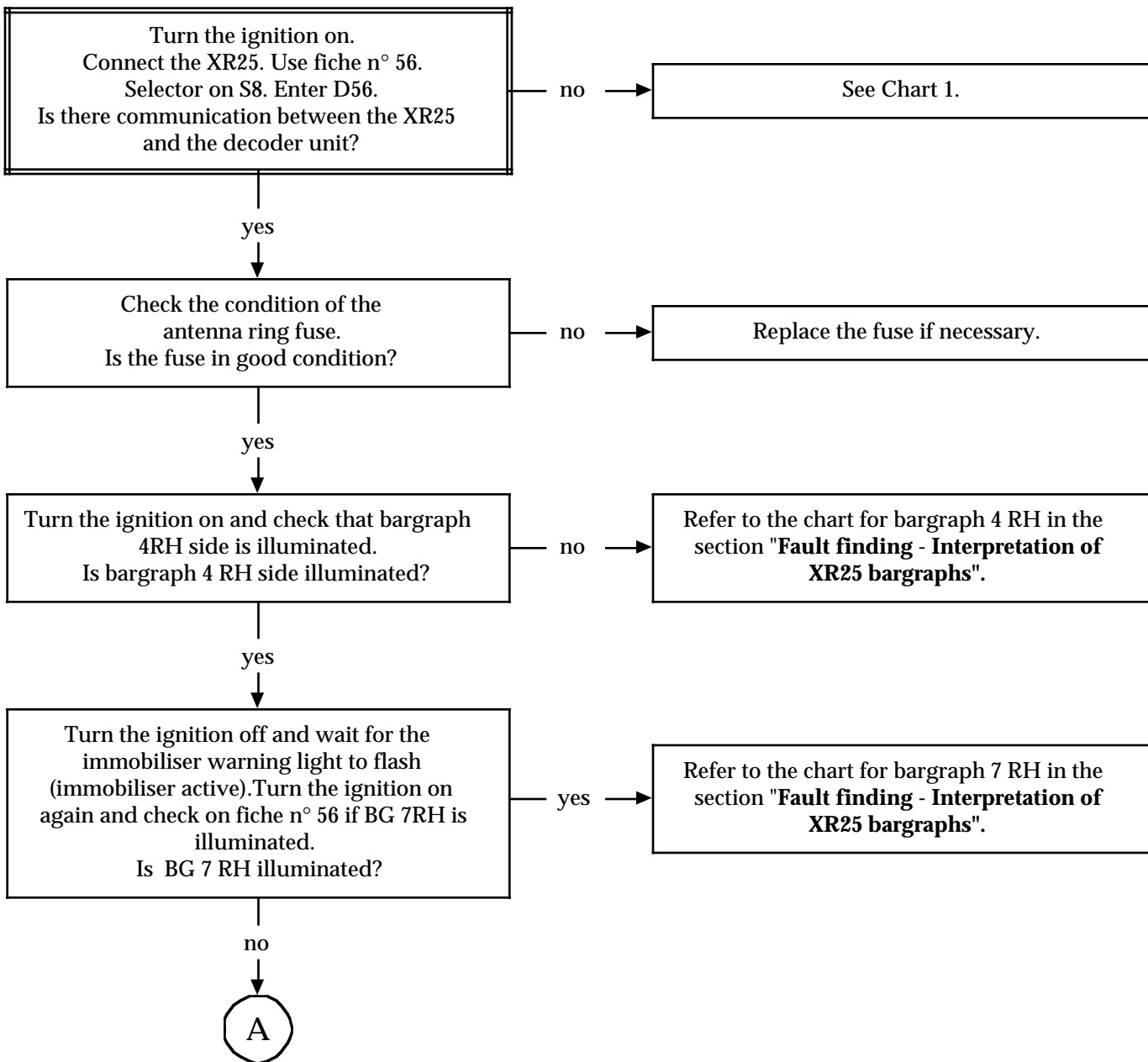
# IMMOBILISER

## Single decoder unit

82

### FAULT FINDING - FAULT CHARTS (diesel version with coded solenoid valve)

<b>Chart 1</b>	<b>IGNITION ON, THE IMMOBILISER WARNING LIGHT FLASHES PERMANENTLY (starting is impossible)</b>
<b>NOTES</b>	None

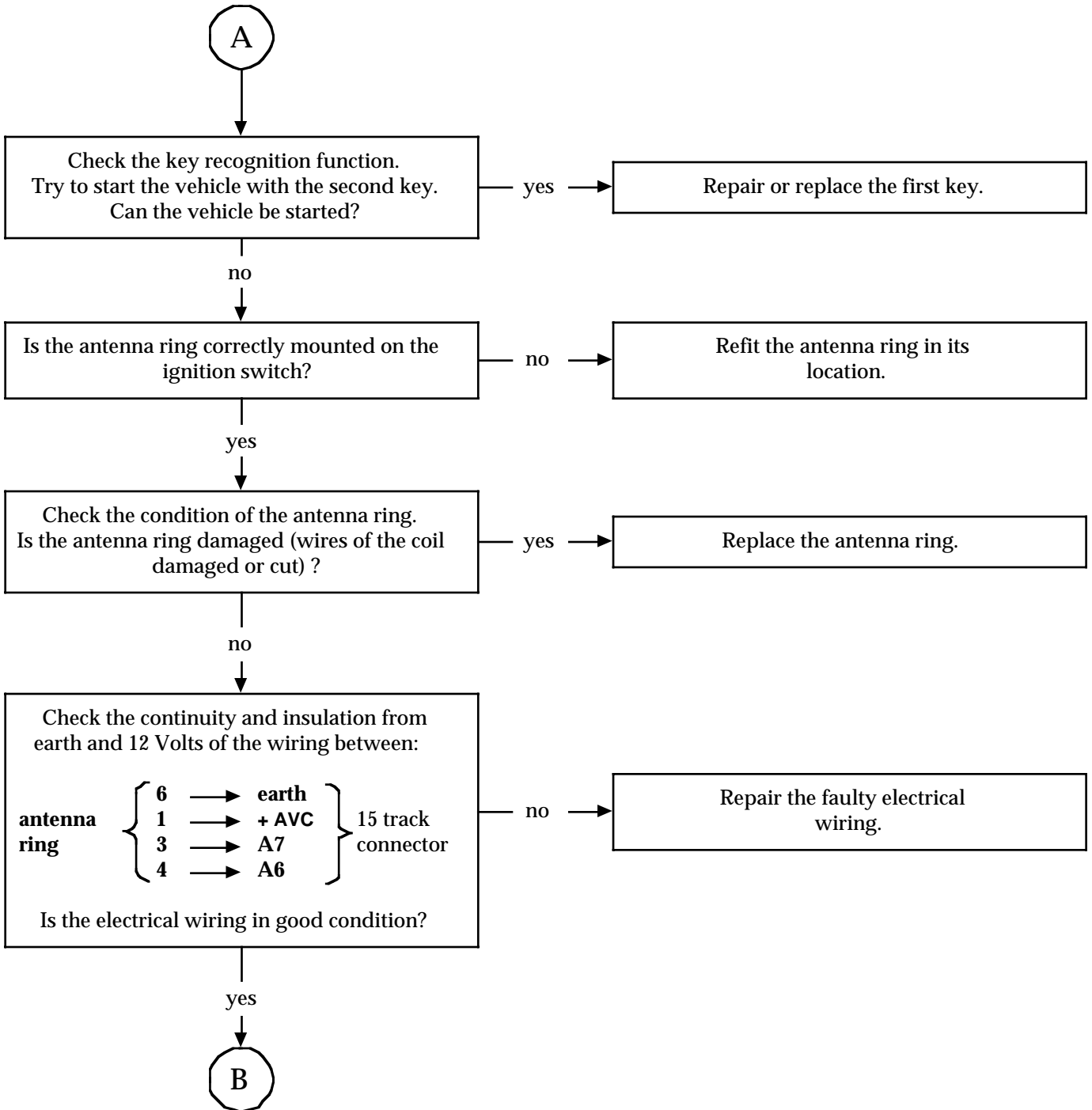


<b>AFTER REPAIR</b>	Carry out a conformity check. Check the immobiliser system is operating correctly. Erase the faults by entering G0**.
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### FAULT FINDING - FAULT CHARTS (diesel version with coded solenoid valve)

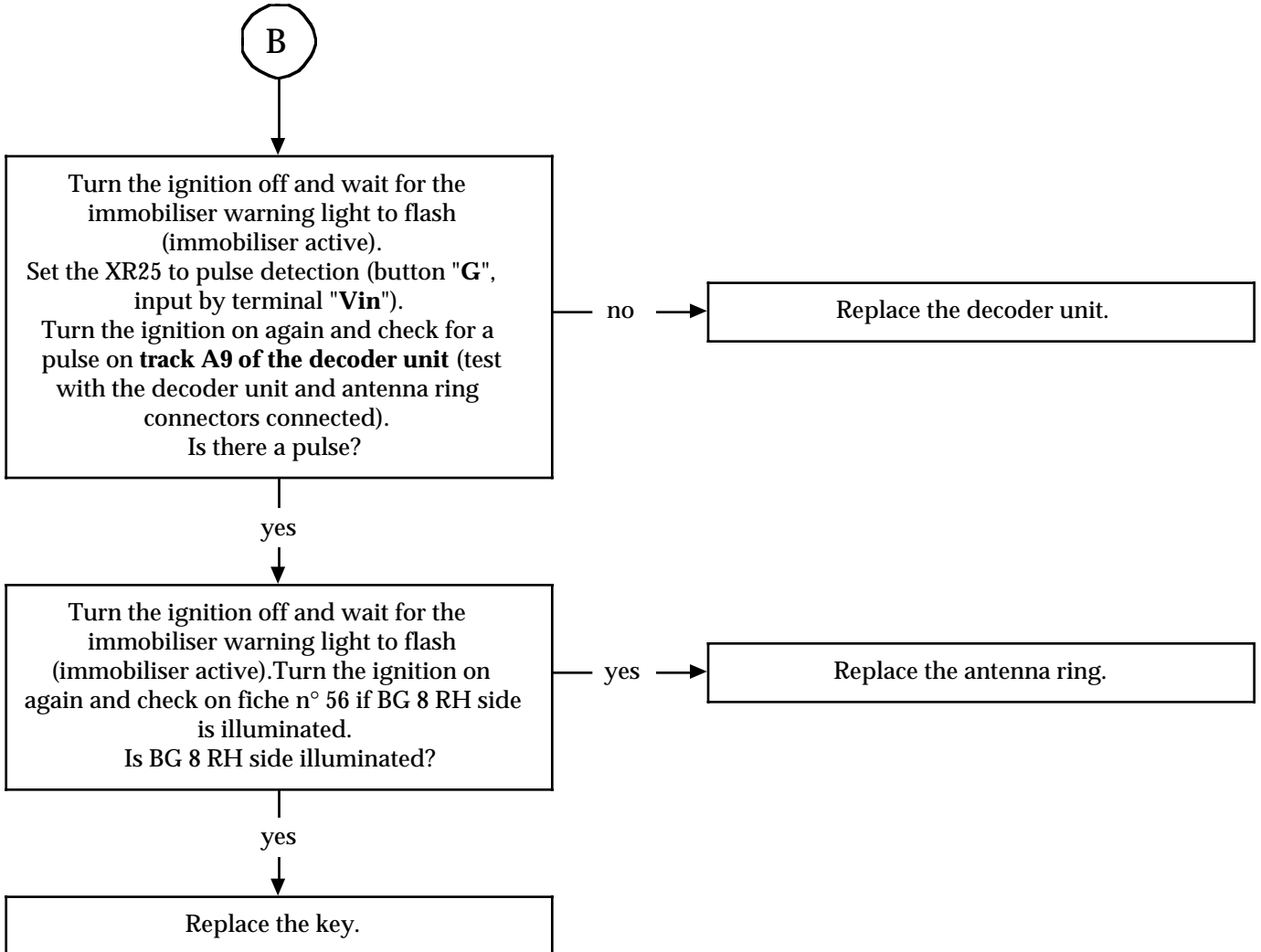
<b>Chart 1</b> CONT 1	
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<b>AFTER REPAIR</b>	Carry out a conformity check. Check the immobiliser system is operating correctly.
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### FAULT FINDING - FAULT CHARTS (diesel version with coded solenoid valve)

<b>Chart 1</b> <b>CONT 2</b>	
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<b>AFTER REPAIR</b>	Carry out a conformity check. Check the immobiliser system is operating correctly.
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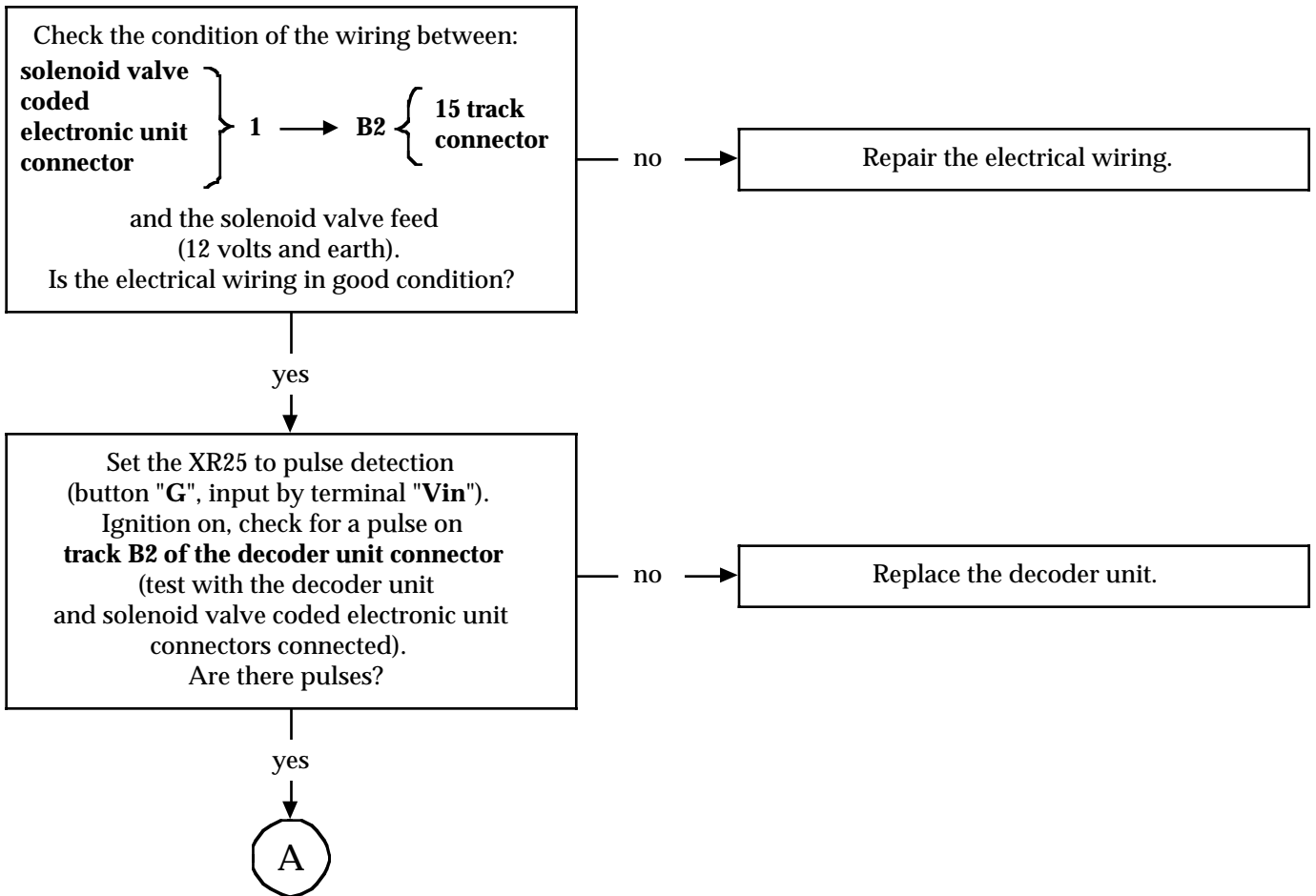
# IMMOBILISER

## Single decoder unit

82

### FAULT FINDING - FAULT CHARTS (diesel version with coded solenoid valve)

<b>Chart 2</b>	<b>THE IMMOBILISER WARNING LIGHT REMAINS PERMANENTLY ILLUMINATED FOR MORE THAN 30 CONSECUTIVE SECONDS, IGNITION ON</b> (the immobiliser warning light illuminates as soon as the ignition is turned on, in the 16 seconds following turning on the ignition or the immobiliser warning light illuminates for more than 30 consecutive seconds)
<b>NOTES</b>	None



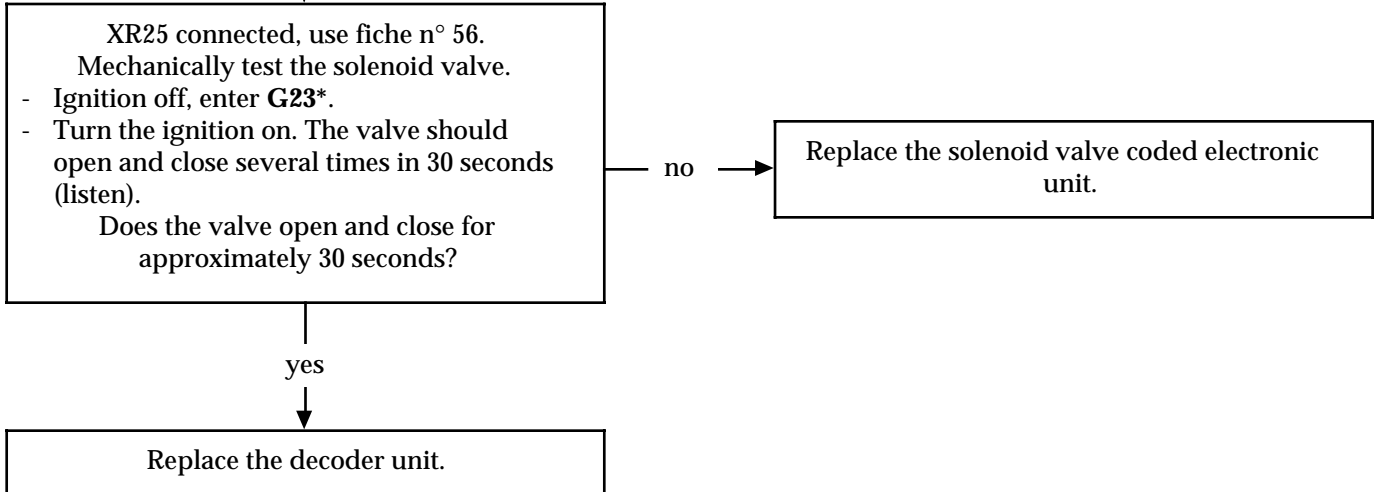
<b>AFTER REPAIR</b>	Carry out a conformity check. Check the immobiliser system is operating correctly.
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### FAULT FINDING - FAULT CHARTS (diesel version with coded solenoid valve)

#### Chart 2 CONT

A



#### **AFTER REPAIR**

Carry out a conformity check.  
Check the immobiliser system is operating correctly.

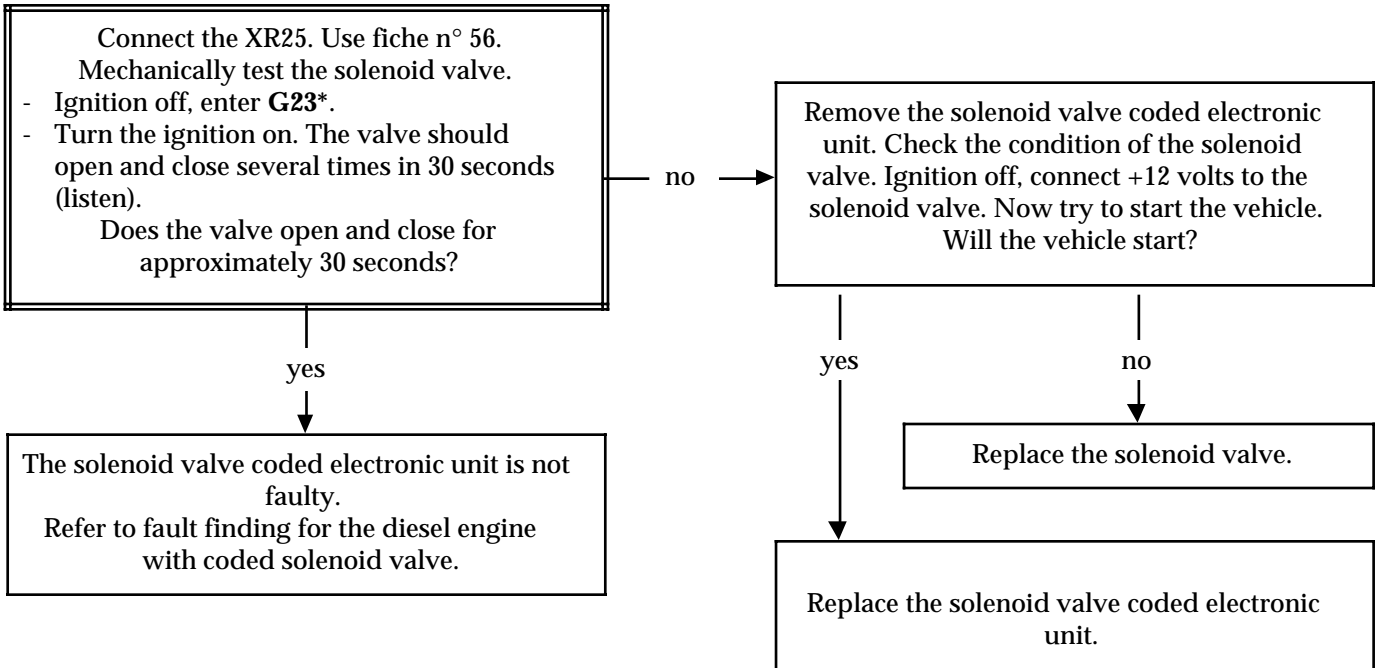
# IMMOBILISER

## Single decoder unit

82

### FAULT FINDING - FAULT CHARTS (diesel version with coded solenoid valve)

<b>Chart 3</b>	<b>WHEN THE IGNITION IS TURNED ON, THE IMMOBILISER WARNING LIGHT ILLUMINATES FOR 3 SECONDS THEN EXTINGUISHES BUT THE VEHICLE CANNOT BE STARTED</b>
<b>NOTES</b>	None

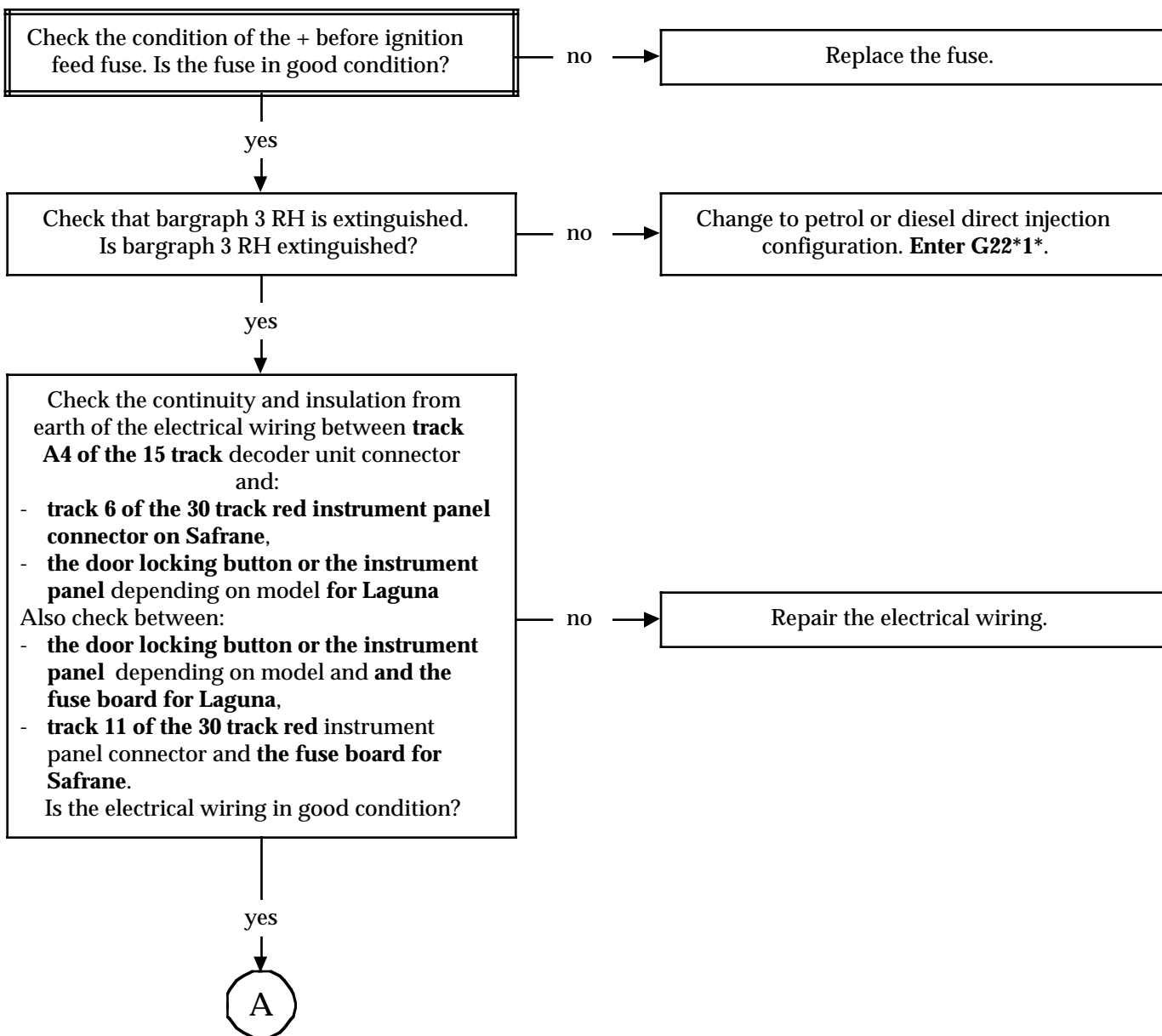


<b>AFTER REPAIR</b>	Carry out a conformity check. Check the immobiliser system is operating correctly.
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### FAULT FINDING - FAULT CHARTS (diesel version with coded solenoid valve)

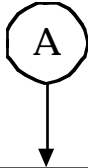
<b>Chart 4</b>	<b>THE IMMOBILISER WARNING LIGHT REMAINS PERMANENTLY ILLUMINATED (even with the ignition off) OR PERMANENTLY EXTINGUISHED</b>
<b>NOTES</b>	Check that the unit has been programmed.



<b>AFTER REPAIR</b>	Carry out a conformity check. Check the immobiliser system is operating correctly. Erase the faults by entering G0**.
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### FAULT FINDING - FAULT CHARTS (diesel version with coded solenoid valve)

**Chart 4**  
**CONT**



Carry out the following tests to determine which component is at fault:

- if the immobiliser warning light is permanently illuminated, disconnect the 15 track decoder unit connector and check that the immobiliser warning light extinguishes,
- if the immobiliser warning light is extinguished, connect track A4 of the 15 track decoder unit connector to a vehicle earth and check if the immobiliser warning light illuminates permanently.

Does the immobiliser warning light illuminate correctly during the test?

no

**On Safrane** : replace the instrument panel.  
**On Laguna** : replace the door locking button or the instrument panel depending on model.

yes

Replace the decoder unit.

**AFTER**  
**REPAIR**

Carry out a conformity check.  
Check the immobiliser system is operating correctly.



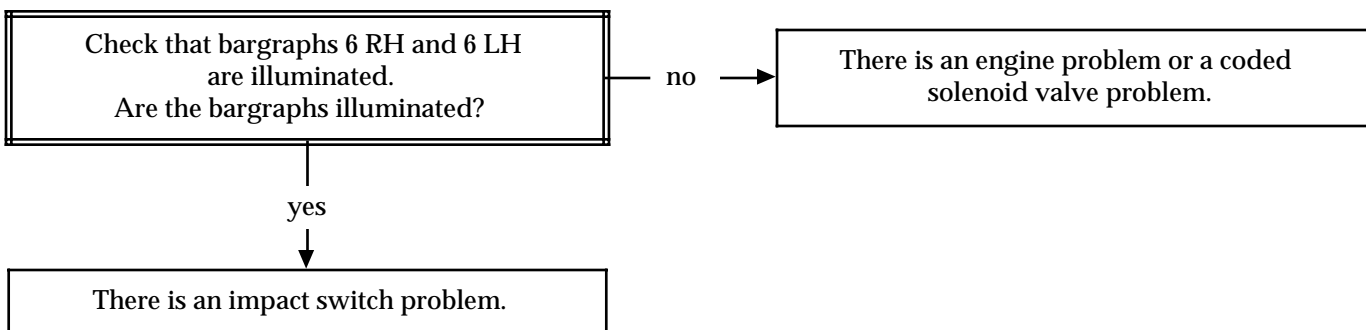
# IMMOBILISER

## Single decoder unit

82

### FAULT FINDING - FAULT CHARTS (diesel version with coded solenoid valve)

<b>Chart 5</b>	<b>THE VEHICLE DOES NOT START</b>
<b>NOTES</b>	None



<b>AFTER REPAIR</b>	Carry out a conformity check. Check the immobiliser system is operating correctly. Erase the faults by entering G0**.
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**FAULT FINDING - CUSTOMER COMPLAINTS**

<b>NOTES</b>	Only consult these customer complaints after a complete check using the XR 25
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**Central door locking button - IR / RF PLIP**

<b>DOOR LOCKING / UNLOCKING PROBLEM</b>	<b>Chart 1</b>
<b>DOOR OPENING PROBLEM USING THE IR OR RF PLIP</b>	<b>Chart 2</b>
<b>THE VEHICLE DOORS DO NOT CLOSE OR DO NOT OPEN</b>	<b>Chart 3</b>
<b>THE CENTRAL DOOR LOCKING BUTTON DOES NOT FLASH OR REMAINS PERMANENTLY ILLUMINATED</b>	<b>Chart 4</b>
<b>THE DIRECTION INDICATORS DO NOT OPERATE WHEN THE DOORS ARE OPENED AND CLOSED</b>	<b>Chart 5</b>
<b>THE COURTESY LIGHT DOES NOT ILLUMINATE WHEN THE DOORS ARE OPENED USING THE IR OR RF PLIP OR THE LIGHT IS ALWAYS ILLUMINATED</b>	<b>Chart 6</b>

# IMMOBILISER

## Single decoder unit

82

### FAULT FINDING - FAULT CHARTS

<b>Chart 1</b>	<b>DOOR LOCKING / UNLOCKING PROBLEM</b>
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<b>NOTES</b>	Check that there are no fault bargraphs. If there are, deal with the bargraphs first.
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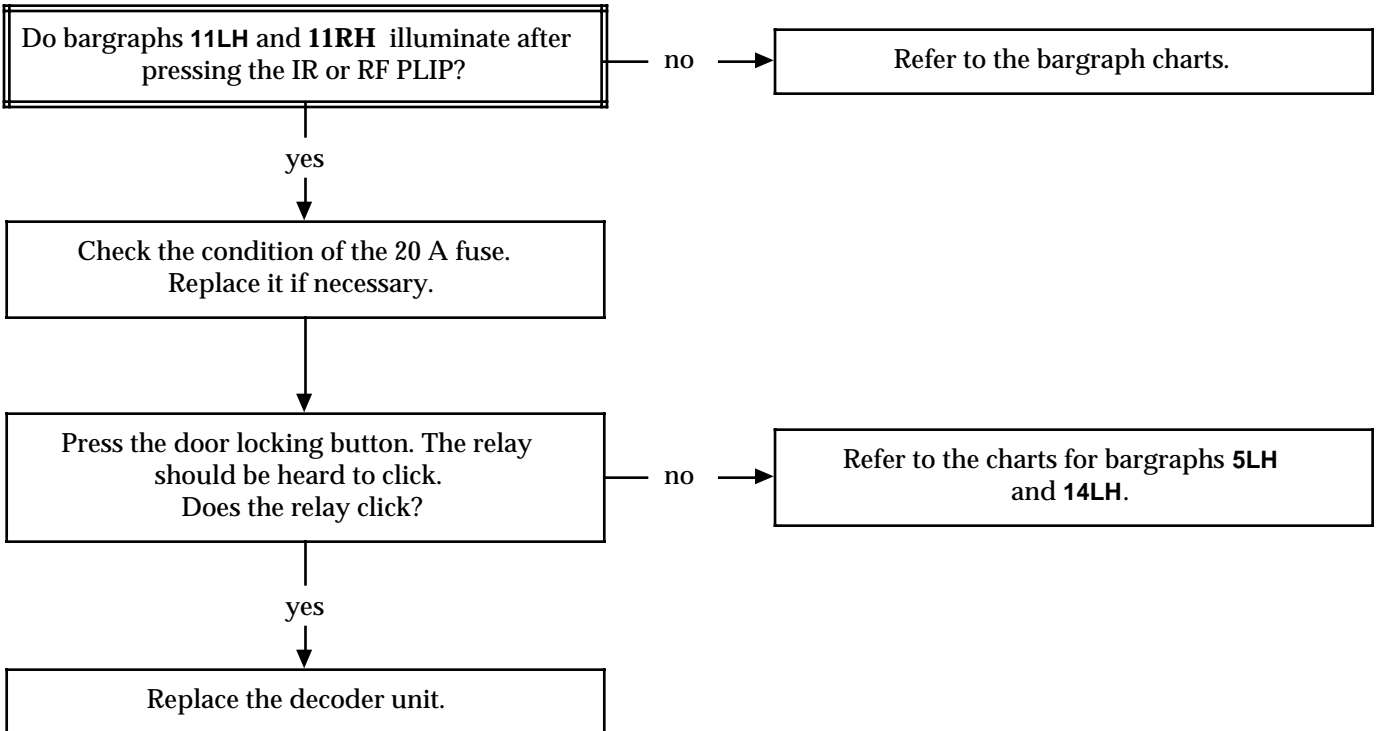
Check that the mechanical system for the doors operates correctly. If it does not, replace the decoder unit.
-----------------------------------------------------------------------------------------------------------------

<b>AFTER REPAIR</b>	Carry out a conformity check. Check the immobiliser system is operating correctly.
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### FAULT FINDING - FAULT CHARTS

<b>Chart 2</b>	<b>DOOR OPENING PROBLEM USING THE IR OR RF PLIP</b>
<b>NOTES</b>	Check that there are no fault bargraphs. If there are, deal with the bargraphs first.

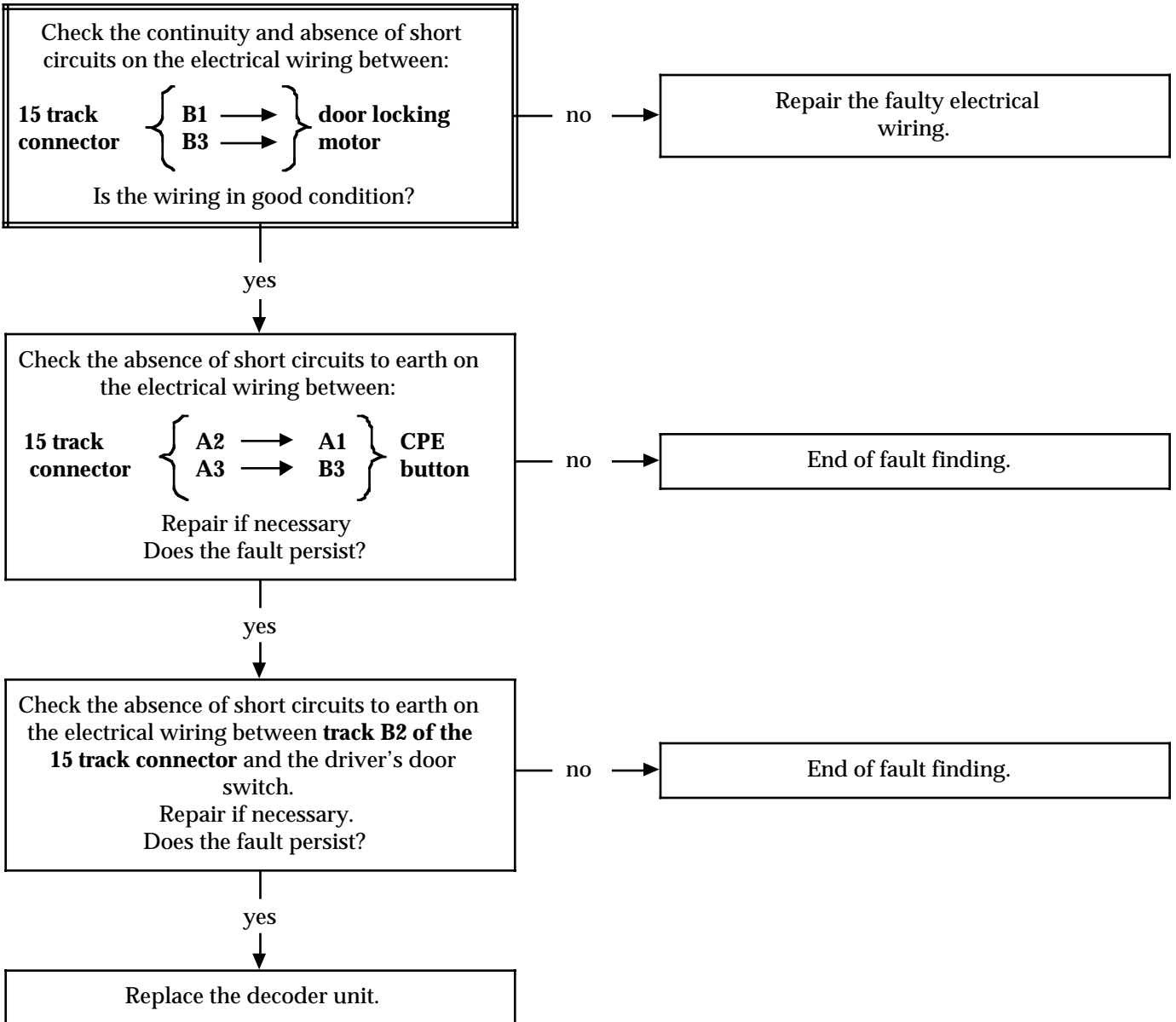


<b>AFTER REPAIR</b>	Carry out a conformity check. Check the immobiliser system is operating correctly.
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### FAULT FINDING - FAULT CHARTS

<b>Chart 3</b>	<b>THE VEHICLE DOORS DO NOT CLOSE OR DO NOT OPEN</b>
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<b>NOTES</b>	<p>Check that there are no fault bargraphs. If there are, deal with the bargraphs first.          Check that the driver's door is closed correctly, the doors will not close if it is not.</p>
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<b>AFTER REPAIR</b>	<p>Carry out a conformity check.          Check the immobiliser system is operating correctly.</p>
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# IMMOBILISER

## Single decoder unit

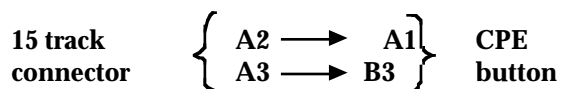
**82**

### FAULT FINDING - FAULT CHARTS

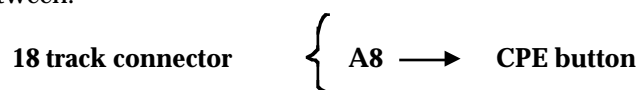
<b>Chart 4</b>	<b>THE CENTRAL DOOR LOCKING BUTTON DOES NOT FLASH OR REMAINS PERMANENTLY ILLUMINATED</b>
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<b>NOTES</b>	Check that there are no fault bargraphs. If there are, deal with the bargraphs first.
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Check the absence of short circuits to earth and 12 V on the electrical wiring between tracks:



and between:



Repair the faulty electrical wiring.

If the fault persists, replace the door locking button.

<b>AFTER REPAIR</b>	Carry out a conformity check. Check the immobiliser system is operating correctly.
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# IMMOBILISER

## Single decoder unit

82

### FAULT FINDING - FAULT CHARTS

<b>Chart 5</b>	<b>THE DIRECTION INDICATORS DO NOT OPERATE WHEN THE DOORS ARE UNLOCKED AND LOCKED</b>
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<b>NOTES</b>	Check that there are no fault bargraphs. If there are, deal with the bargraphs first.
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Check that the direction indicators operate when the stalk is pressed.  
If they do not operate, replace the direction indicators feed fuse.

Check the continuity and absence of short circuits to earth and 12 V on the electrical wiring between **track B5 of the 18 track** decoder unit connector and the direction indicators.  
Repair the faulty electrical wiring.

If the fault persists, replace the decoder unit.

<b>AFTER REPAIR</b>	Carry out a conformity check. Check the immobiliser system is operating correctly.
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# IMMOBILISER

## Single decoder unit

82

### FAULT FINDING - FAULT CHARTS

<b>Chart 6</b>	<b>THE COURTESY LIGHT DOES NOT ILLUMINATE WHEN THE DOORS ARE OPENED USING THE IR OR RF PLIP OR THE LIGHT IS ALWAYS ILLUMINATED</b>
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<b>NOTES</b>	Check that there are no fault bargraphs. If there are, deal with the bargraphs first.
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Check that when the doors are unlocked, the courtesy light illuminates when the doors are opened.  
If the courtesy light does not illuminate, check the position of the courtesy light button and the condition of the courtesy light feed fuse.

Check the continuity and absence of short circuits to earth on the electrical wiring between **track B7 of the 18 track** decoder unit connector and the **courtesy light**.  
Repair the faulty electrical wiring.

<b>AFTER REPAIR</b>	Carry out a conformity check. Check the immobiliser system is operating correctly.
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a0602.0







# IMMOBILISER

## Single decoder unit

# 82

### FAULT FINDING - CHECKING CONFORMITY

<b>NOTES</b>	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	D56 (selector on S8)		<b>n.56</b>
2			<p style="text-align: center;">1</p> 	Code present
3	Conformity of decoder unit	G70*		<b>X X X</b> Part Number displayed in 2 sequences
4	Interpretation of bargraphs normally illuminated		<p style="text-align: center;">2</p>   <p style="text-align: center;">2</p>   <p style="text-align: center;">3</p> 	<p>Type of remote control:</p> <ul style="list-style-type: none"> <li>- Illuminated for infrared remote control.</li> <li>- Extinguished for radio frequency remote control</li> </ul> <p>Illuminated for with courtesy light timer. Extinguished for without courtesy light timer</p> <p>Illuminated for programming with 2 keys. Extinguished for programming with 1 key</p>


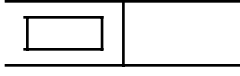
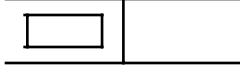

# IMMOBILISER

## Single decoder unit

# 82

### FAULT FINDING - CHECKING CONFORMITY

<b>NOTES</b>	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 - Petrol / Diesel		<p>3</p> 	<p>Illuminated if configured for a diesel vehicle with a coded solenoid valve. Extinguished if configured for a petrol or diesel direct injection vehicle. Command:</p> <ul style="list-style-type: none"> <li>- G22*1* configuration for petrol.</li> <li>- G22*2* configuration for diesel</li> </ul>
6	Forced protection mode		<p>9</p> 	<p>Illuminated only after entering command G04* on the XR 25 (ignition off immobiliser active). Vehicle cannot be started as long as BG 9LH side is illuminated</p>
7	Immobiliser status		<p>10</p> 	<p>Illuminated if immobiliser is active: turn off ignition and wait for 10 seconds for BG 10 LH side to illuminate. Extinguished if immobiliser is inactive</p>
8	Presence of the key		<p>8</p> 	<p>Illuminated when the ignition is turned on if the key is coded (on condition that the vehicle was protected before the ignition was turned on, immobiliser warning light flashing). <b>Note:</b> in normal operation, bargraphs 8 RH , 9 RH and 10 RH should be illuminated together.</p>

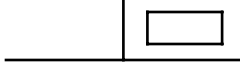
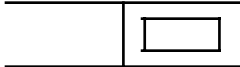
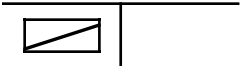

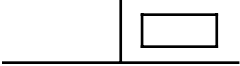
# IMMOBILISER

## Single decoder unit

# 82

### FAULT FINDING - CHECKING CONFORMITY

<b>NOTES</b>	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		<p>9</p> 	<p>Illuminated when the ignition is turned on if the key is coded and has the correct format (on condition that the vehicle was protected before the ignition was turned on, immobiliser warning light flashing).</p> <p><b>Note:</b> in normal operation, bargraphs 8 RH, 9 RH and 10 RH should be illuminated together.</p>
10	Valid key code		<p>10</p>   <p>11</p> 	<p>Illuminated when the ignition is turned on if the key is coded and has the correct format and the correct code (on condition that the vehicle was protected before the ignition was turned on, immobiliser warning light flashing).</p> <p><b>Note:</b> in normal operation, bargraphs 8 RH, 9 RH and 10 RH should be illuminated together.</p>
11	Reception of the infrared or radio frequency signal from the PLIP		<p>11</p>   <p>12</p> 	<p>Illuminated for approximately 3 seconds if the infrared signal is received by the decoder unit via the infrared transmitter.</p> <p>Illuminated for approximately 3 seconds if the infrared signal received by the decoder unit via the infrared transmitter is the correct signal.</p>
12	Presence of interior lighting cut-out following operation of the IR PLIP			<p>Not used.</p> <p>If illuminated, ignore.</p>


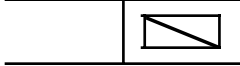
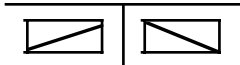
# IMMOBILISER

## Single decoder unit

# 82

### FAULT FINDING - CHECKING CONFORMITY

<b>NOTES</b>	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		<p><b>14</b></p> 	<p>Illuminated when door lock / unlock information is sent by the central door locking button and received.</p> <p>Enter * 14 on the XR25 to determine the information received by the decoder unit:</p> <ul style="list-style-type: none"> <li>- if * 14 = 0 door lock information</li> <li>- if * 14 = 1 door unlock information</li> </ul>
14	Sending of door lock/unlock information by the decoder unit to the locking micromotors		<p><b>14</b></p> 	<p>Illuminated when door lock/unlock information is sent by the decoder unit to the locking micromotors .</p> <p>Enter * 34 on the XR25 to determine the information sent by the decoder unit:</p> <ul style="list-style-type: none"> <li>- if * 34 = 0 door unlock information</li> <li>- if * 34 = 1 door lock information</li> </ul> <p>(<b>Note:</b> Ignore what is written on fiche n° 56, XR25 cassette n° 16).</p>
15	Reception of electric window riser information		<p><b>15</b></p> 	<p>Automatic electric window riser on high specification Laguna</p>

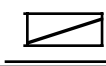

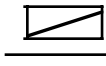
# IMMOBILISER

## Single decoder unit

# 82

### FAULT FINDING - CHECKING CONFORMITY

<b>NOTES</b>	If a fault bargraph illuminates, refer to the corresponding fault chart.
--------------	--------------------------------------------------------------------------

Order of operations	Function to be checked	Action	Bargraph	Display and notes
16	Reception of door switch information		<b>16</b> 	Illuminated if doors open.
17	Reception of programming in progress or decoder resynchronisation or programming not carried out information		<b>17</b> 	17 LH illuminated if programming or resynchronisation is in progress. 17 RH illuminated if programming has not been carried out.
18	Reception of programming of 1st key information		<b>18</b> 	Illuminated if programming of the 1st key is in progress.

### ADDITIONAL CHECKS

#### COMMAND MODES G--\*

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

- 03** Courtesy light control (illuminates the courtesy light for 3 seconds).
- 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).
- 13** End of fault finding.
- 14** Electric window authorisation command for 3 seconds (Laguna high specification only, fitted with automatic window raising).
- 15** Electric window raise command for 3 seconds (Laguna high specification only, fitted with automatic window raising).
- 22** Configuration :
  - **G 22 \* 1 \*** = configuration for petrol or diesel direct injection (bargraph 3 RH side should be extinguished).
  - **G 22 \* 2 \*** = configuration for diesel with coded solenoid valve (bargraph 3 RH side should be illuminated).
- 23** Forced solenoid valve test mode (used on diesel vehicles with coded solenoid valve only).  
Activates the coded solenoid valve (open / close) for approximately 30 seconds (listen).  
Note:
  - the decoder unit must be configured for diesel with coded solenoid valve
  - bargraph 8 LH side must be illuminated during the test.
- 31** Configuration :
  - **G31 \* 1 \*** = Programming with 1 key.
  - **G31 \* 2 \*** = Programming with 2 keys.(see Technical Note NT 2725, page 82-66)
- 39** Transponder line.

### ADDITIONAL CHECKS

#### COMMAND MODES G--\*

**40** Entering the emergency code (bargraph 10 LH side must be illuminated and the ignition must be on).

This command mode may be used to enter the emergency code, but cannot be used for decoding the injection computer or coded solenoid valve.

Enter the number of the vehicle's emergency code on the XR25 and validate with "\*".

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

If the code number is incorrect, "**Fin**" 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** before trying again (the ignition must be turned off and on again between each attempt).

**47** Configuration of courtesy light timer:

- **G 47 \* 0 \*** = cancels courtesy light timer.

- **G 47 \* 1 \*** = activates courtesy light timer.

**48** Configuration of the plip remote control:

- **G 48 \* 1 \*** = infrared.

- **G 48 \* 2 \*** = radio frequency.

**70** Reading the Part Number (Part Number of the decoder unit).

#### LIST OF THE VARIOUS #

**26** Source of the last command for the opening elements:

1 → Infrared remote control

2 → Central door locking button

**27** Operation of the last command for the opening elements:

1 → Unlock

2 → Lock