Clio

8 Electrical equipment

87B PASSENGER COMPARTMENT CONNECTION UNIT

UCH
VDiag No.: 0F

V2 **Edition Anglaise**

1. SCOPE OF THIS DOCUMENT

This document presents the fault finding method applicable to all computers with the following specifications:

Vehicle(s): **Clio II F6** *Function concerned*: **PASSENGER COMPARTMENT CONNECTION UNIT**	*Computer name*: **UCH** *Vdiag No.*: **0F**

2. PREREQUISITES FOR FAULT FINDING

Documentation type

Fault finding procedures (this document):
– Assisted fault finding (integrated into the **diagnostic tool**), Dialogys.

Wiring Diagrams:
– Visu-Schéma.

Type of diagnostic tools

– CLIP

Special tooling required

Special tooling required:	
	Diagnostic tool
	Multimeter
Elé. 1622	Bornier
Elé. 1681	Universal bornier

If the information obtained by the diagnostic tool requires the electrical continuity to be checked, connect bornier Elé. 1622 or universal bornier Elé. 1681.

WARNING:
– All checks performed using bornier **Elé. 1622** or **Elé. 1681** must be performed with the battery disconnected.
– The bornier is only designed to be used with a multimeter. Never power the test points with **12 V**.

3. REMINDERS

Procedure

To run diagnostics on the vehicle computers, switch on the ignition using the key.

Faults

Faults are declared present or stored (depending on whether they appeared in a certain context and have disappeared since, or whether they remain present but are not diagnosed within the current context).

The **present** or **stored** status of faults must be considered when using the **diagnostic tool** after switching on **+ after ignition feed** (without activating any system components).

For a **present fault**, apply the procedure described in the **Interpretation of faults** section.

For a **stored fault**, note the faults displayed and apply the **Notes** section.

If the fault is **confirmed** when the instructions are applied, the fault is present. Deal with the fault.

If the fault is **not confirmed**, check:
– the electrical lines which correspond to the fault,
– the connectors on these lines (corrosion, bent pins, etc.),
– the **resistance** of the faulty component,
– the condition of the wires (melted or cut insulation, wear).

Conformity check

The conformity check is designed to check the statuses and parameters that do not display any faults on the **diagnostic tool** when they are inconsistent. Therefore, this stage is used to:

– carry out fault finding on faults that do not have a fault display, and which may correspond to a customer complaint,
– check that the system is operating correctly and that there is no risk of a fault recurring after repair.

This section gives the fault finding procedures for statuses and parameters and the conditions for checking them.

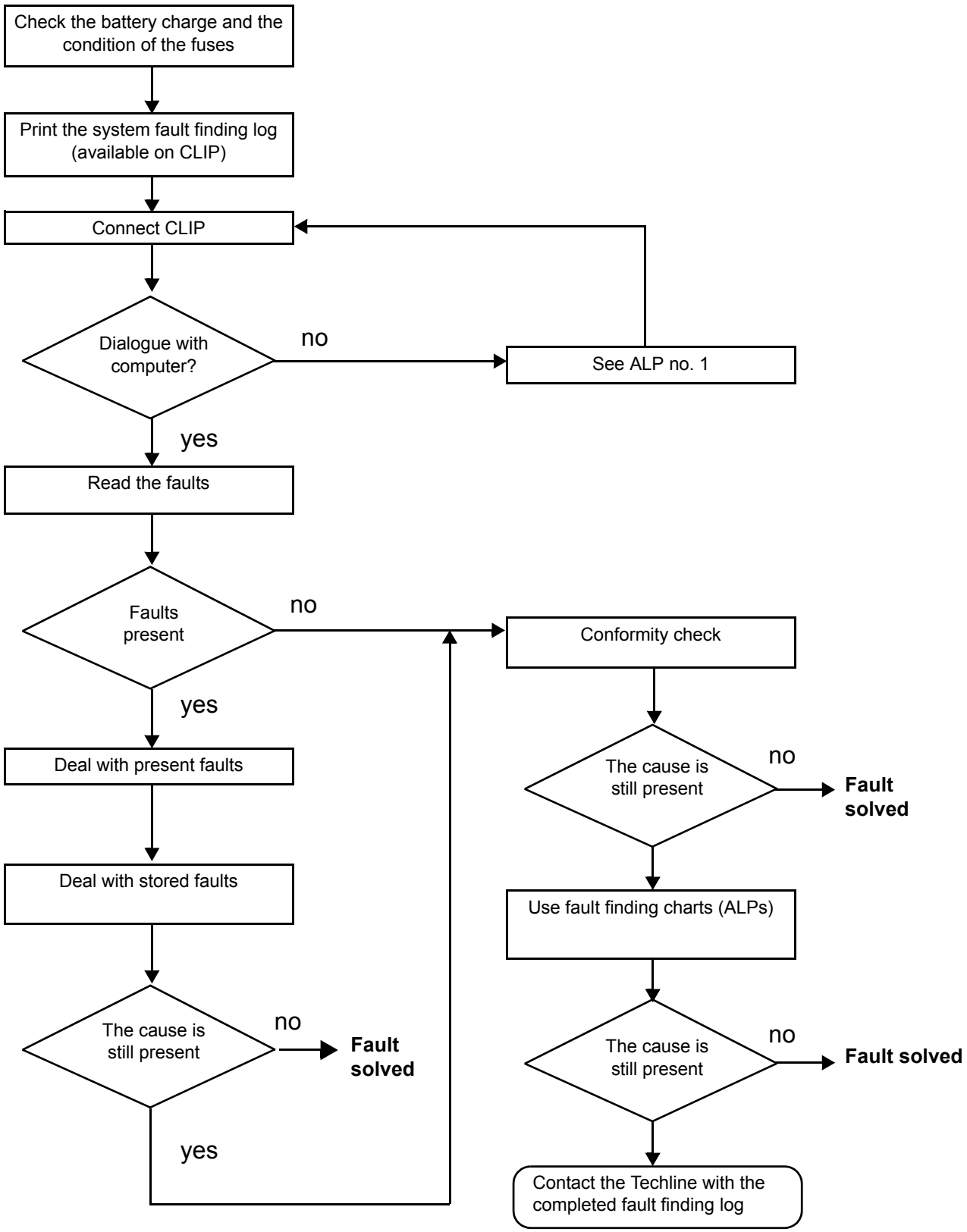
If a status is not behaving normally or a parameter is outside permitted tolerance values, you should consult the corresponding fault finding page.

Customer complaints - Fault finding chart

If the test with the **diagnostic tool** is OK but the customer complaint is still present, the fault should be dealt with by **customer complaints**.

A summary of the overall procedure to follow is provided on the following page in the form of a flow chart.

4. FAULT FINDING PROCEDURE



4. FAULT FINDING PROCEDURE (CONTINUED)

Wiring check

Note:
Carry out each requested check visually. Do not remove a connector if it is not required.

Note:
Repeated connections and disconnections alter the functionality of the connectors and increase the risk of poor electrical contact. Limit the number of connections/disconnections as much as possible.

Note:
The check is carried out on the 2 parts of the connection. There may be two types of connection:
– Connector / Connector
– Connector / Device

Fault finding problems
Disconnecting the connectors and/or manipulating the wiring may temporarily clear the cause of a fault.
Electrical measurements of voltage, resistance and insulation are generally correct, especially if the fault is not present when the analysis is carried out (stored fault).

Visual inspection of the connection:
Check that the connector is connected correctly and that the male and female parts of the connection are correctly coupled.

Visual inspection of the area around the connection:
- Check the condition of the mounting (pin, strap, adhesive tape, etc.) if the connectors are attached to the vehicle.
- Check that there is no damage to the wiring trim (sheath, foam, adhesive tape, etc.) near the wiring.
- Check that there is no damage to the electrical wires at the connector outputs, in particular on the insulating material (wear, cuts, burns, etc.).

Disconnect the connector to continue the checks.

Visual inspection of the plastic casing:
- Check that there is no mechanical damage (casing crushed, cracked, broken, etc.), in particular to the fragile components (lever, lock, openings, etc.).
- Check that there is no heat damage (casing melted, darker, deformed, etc.).
- Check that there are no stains (grease, mud, liquid, etc.).

Visual inspection of the metal contacts:
(The female contact is called CLIP. The male contact is called TAB.)
- Check that there are no bent contacts (the contact is not inserted correctly and can come out of the back of the connector). The spring contact of the connector when the wire is gently pulled.
- Check that there is no damage (folded tabs, clips open too wide, blackened or melted contact, etc.).
- Check that there is no oxidation on the metal contacts.

Visual inspection of the sealing:
(Only for watertight connectors)
- Check for the seal on the connection (between the 2 parts of the connection).
- Check the seal at the back of the connectors:
  - *For unit* joints (1 for each wire), check that the unit joints are present on each electrical wire and that they are correctly positioned in the opening (level with the housing). Check that plugs are present on openings which are not used.
  - For a *grommet* seal (one seal which covers the entire internal surface of the connector), check that the seal is present.
  - For *gel* seals, check for gel in all of the openings without removing the excess or any protruding sections (it does not matter if there is gel on the contacts).
  - For *hotmelt* sealing (heat-shrink sheath with glue), check that the sheath has contracted correctly on the rear of the connectors and electrical wires, and that the hardened glue comes out of the side of the wire.
- Check that there is no damage to any of the seals (cuts, burns, significant deformation, etc.).

If a fault is detected, repair or replace the wiring (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**).

5. FAULT FINDING LOG

IMPORTANT!

IMPORTANT
All faults involving a complex system call for thorough diagnostics with the appropriate tools. The FAULT FINDING LOG, which should be completed during the fault finding procedure, ensures a record is kept of the procedure carried out. It is an essential document when consulting the manufacturer.

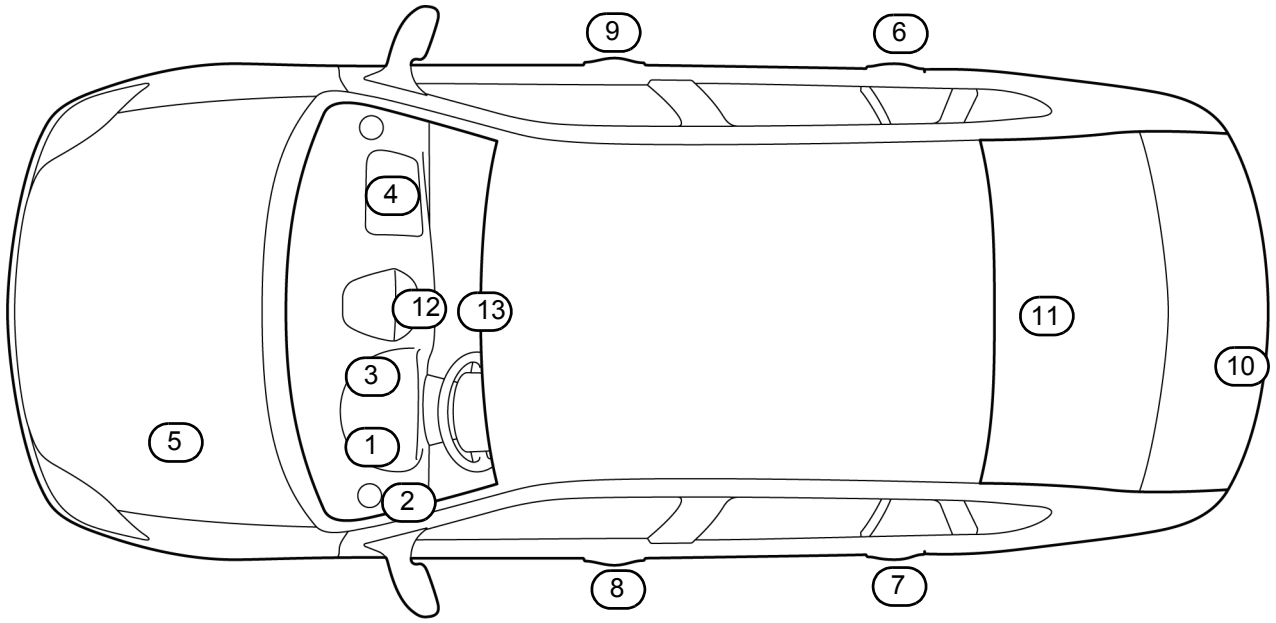
IT IS THEREFORE MANDATORY TO FILL IN A FAULT FINDING LOG EACH TIME IT IS REQUESTED BY TECHLINE OR THE WARRANTY RETURNS DEPARTMENT.

You will always be asked for this log:
– when requesting technical assistance from the Techline,
– when requesting approval before replacing parts for which approval is compulsory,
– to be attached to monitored parts for which reimbursement is requested. The log is needed for warranty reimbursement, and enables better analysis of the parts removed.

6. SAFETY INSTRUCTIONS

The safety instructions must be followed at all times when working on components, to avoid damage or injury:

– check the battery voltage to avoid incorrect operation of computer functions,
– use the proper tools.



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1	UCH
2	Passenger Compartment Fuse and Relay Box
3	Instrument panel
4	Diagnostic socket
5	Injection computer
6	Rear right-hand door rabbet switch
7	Rear left-hand door rabbet switch
8	Driver's door rabbet switch
9	Passenger's door rabbet switch
10	Luggage compartment switch
11	Heated rear screen
12	Heated rear screen switch
13	Airbag / pretensioner computer

GENERAL OPERATION

The UCH is involved in the following four functions (shared between several computers):

– Access - Security Function
This function is divided into three sub-functions which are: Access, Protection and Starting (see **82D, Access – Security**).

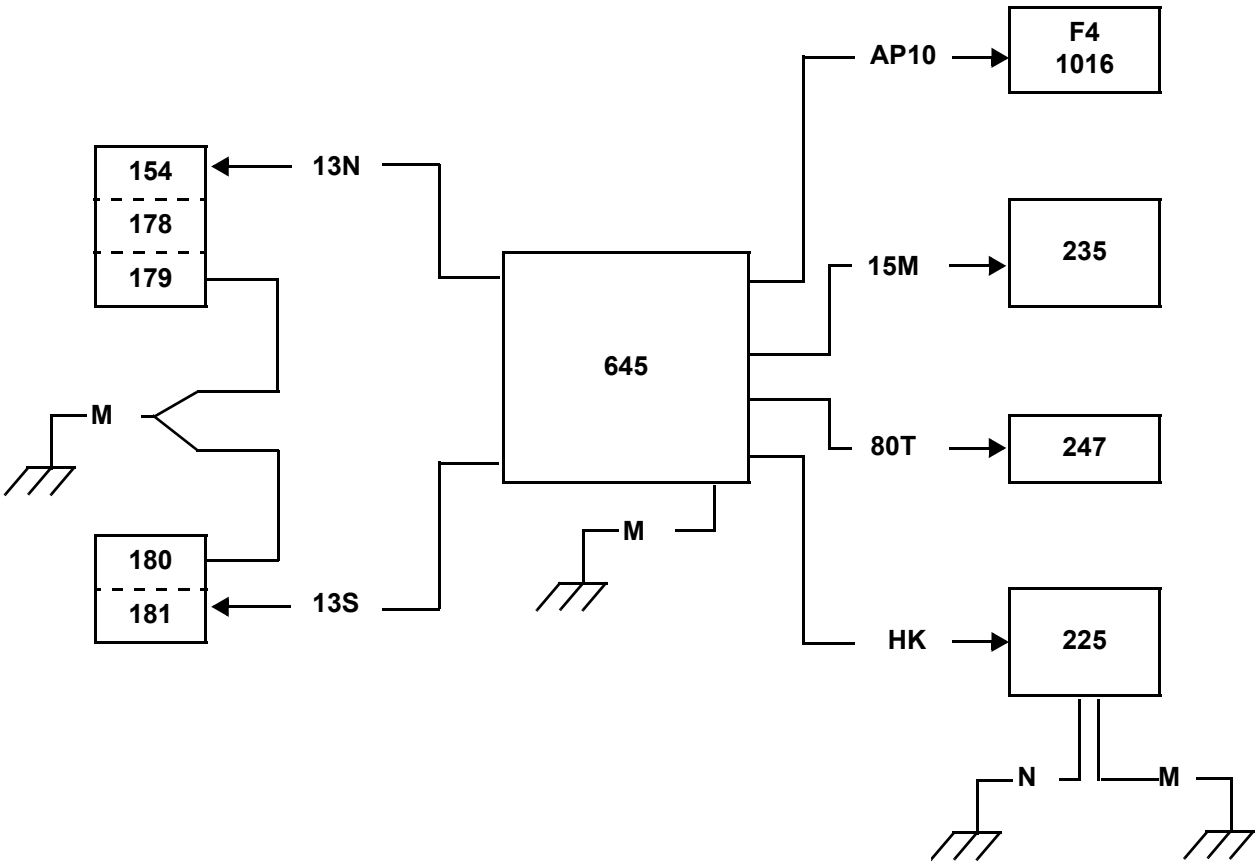
– Heating and manual air conditioning function.
In this function, the UCH manages the heated rear screen operation indicator lights, heating controls and air conditioning activation requests, by sending requests to the engine management computer:
– In the case of a vehicle fitted with manual air conditioning, by pressing on the air conditioning button.

– Wiping function
This function is divided into two sub-functions, which are: Wiper control and Wiper power (see **85A, Wiping - Washing**).

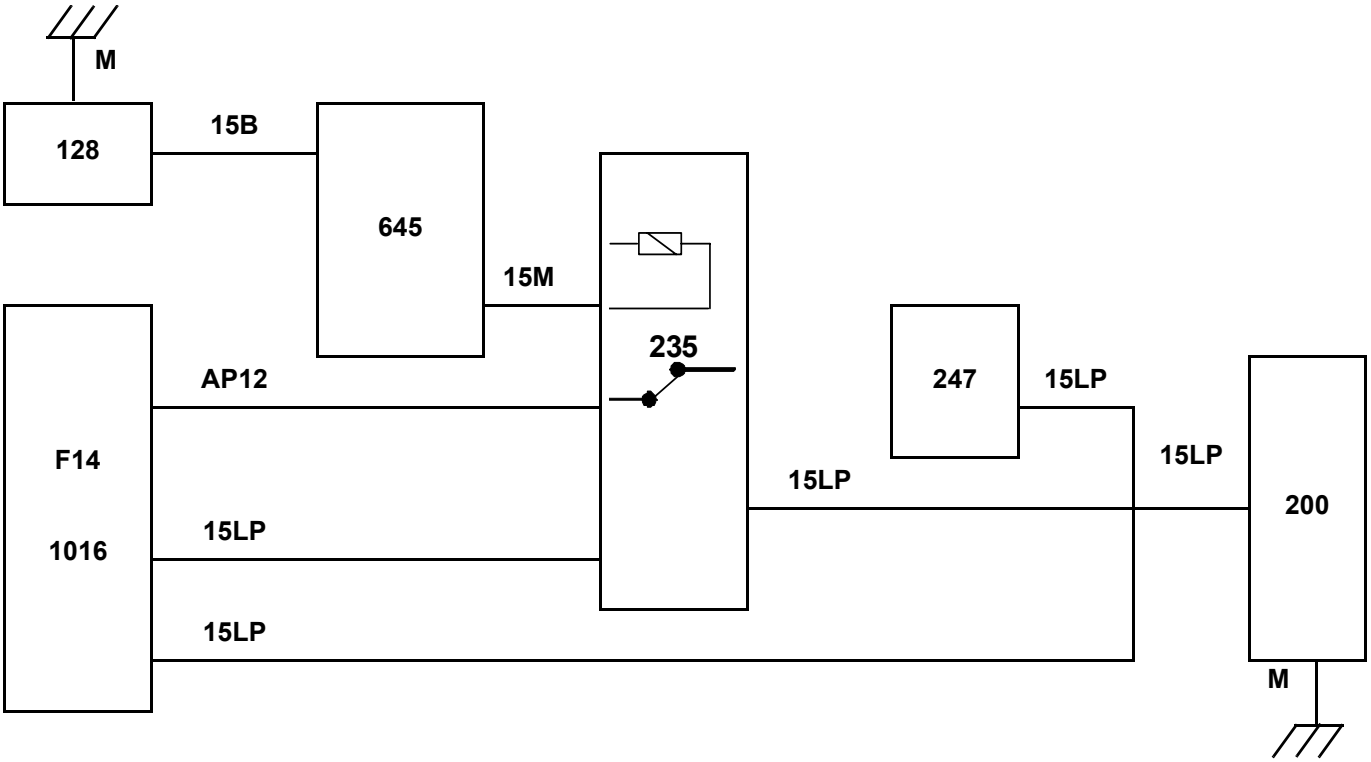
– Lighting Function
This function is divided into two sub-functions, which are: Lighting control and Lighting power (see **80D, Lighting**).

List of system components and associated component codes:

645	Passenger compartment electrical control unit
1016	Passenger compartment fuse box
235	Heated rear screen relay
247	Instrument panel
225	Diagnostic socket
154	Luggage compartment switch
178	Rear right-hand door rabbet switch
179	Rear left-hand door rabbet switch
180	Driver's door rabbet switch
181	Passenger's door rabbet switch



Heated rear screen diagram:



UCH CONFIGURATIONS

The configuration options for the UCH are:

Configuration	Configuration reading	Name of configuration	Configuration
CF050	**LC020**	Factory fitted perimeter protection	**SC008 UCH type**
CF077	**LC124**	Retrofitted alarm	
CF130	**LC163**	Overspeed alarm	
CF071	**LC164**	Software lock	
CF082	**LC149**	Key locking	
CF052	**LC166**	De-icing function	
CF051	**LC023**	Engine type	
CF054	**LC009**	Hazard warning lights illuminated upon impact	**SC008 UCH type**
CF063	**LC047**	Timed courtesy light	
CF072	**LC168**	Courtesy light timer	
CF065	**LC142**	Rear fog lights	
CF167	**LC065**	Flashing buzzer	**CF167 Flashing buzzer**

Configuration	Configuration reading	Name of configuration	Configuration
CF073	**LC097**	Type of key	**SC008 UCH type**
CF048	**LC165**	Seat belt not fastened sensor	
CF070	**LC113**	Airbag	
CF061	**LC169**	Vehicle locked by RAID* function	
CF059	**LC012**	Automatic relocking	
CF060	**LC170**	RAID* function authorisation by diag** tool	
CF047	**LC171**	Radiofrequency function	
CF064	**LC172**	Type of CPE*** button	
CF067	**LC167**	Heated rear screen when driving	**SC008 UCH type**
CF066	**LC064**	Rear screen wiper	
CF069	**LC116**	Intermittent variation according to speed	
CF272	**LC186**	SDO****	**CF272 "SDO****"**

*RAID: Renault Anti-Intruder Device.
**diag: diagnostic.
***CPE: Electric central door locking.
****SDO: Single Door Opening

CONFIGURATION OF THE UCH COMPUTER

- With the ignition on, establish dialogue with the UCH computer.
- In the **Repair Mode** menu, go to the **Configuration** tab.

Choose the scenario: **SC008 UCH type** and follow the instructions on the **diagnostic tool**.

Single Door Opening (SDO*) function:

Configuration **CF272 SDO*** enables the activation or deactivation of the Single Door Opening function.

There are two possible options for the configuration of this function:
WITH:
An initial press of the button unlocks the driver's door.
Pressing the button for a second time unlocks the whole vehicle after a predefined time.
WITHOUT:
Pressing the button once only unlocks the whole vehicle.

Check the configuration has been correctly stored using the **Configuration reading** menu.

*SDO: Single Door Opening

When replacing the UCH, component code **645** (see **MR 430, Mechanical, 87B, Passenger compartment connection unit, UCH: Removal - Refitting**), perform the programming and configurations in the following order:
– Enter the VIN, using command **VP004 Enter VIN** (see **Programming**).
– Program the UCH using command **SC004 Program UCH** (see **Interpretation of commands**).
– Configure the UCH (in the Configuration and programming menu) using command **SC008 UCH type** (see **Interpretation of commands**).
– Allocate the keys using command **SC015 Key allocation** (see **Interpretation of commands**).

The removal of the UCH is carried out after the left storage compartment has been removed.

The UCH is clipped onto its mounting.

WARNING:
Do not remove the UCH mounting as this may damage it.
If it is removed it must be replaced.

Tool fault	Diagnostic tool title
DF162	Heated rear screen relay control
DF177	Siren circuit
DF184	Impact detected signal
DF271	UCH internal electronic fault
DF273	Impact connection

DF162 PRESENT OR STORED	HEATED REAR SCREEN RELAY CONTROL CC.1: Short circuit to + 12 V CC.0: Open circuit or short circuit to earth

NOTES	**Conditions for applying the fault finding procedure to stored faults:** The fault is declared **present** after activation of the heated rear screen, with the engine running.
	Special note: See **Wiring Diagrams Technical Note for Clio II F6**.

CC.0	***NOTES***	None.

Check the condition of fuse **F20** in the passenger compartment fuse box, component code **1016** and the correct operation of the heated rear screen relay, component code **235**. Replace the fuse (see **MR 430, Mechanical, 81C, Fuses, Fuses: List and location of components**) and the heated rear screen relay if they are faulty.

Check the **condition** and the **connection** of the connectors of the heated rear screen relay, component code **235**. If the connectors are faulty and if there is a repair procedure (see **Technical Note 6015A, Repairing electrical wiring, Wiring: Precautions for repair),** repair the connector, otherwise replace the wiring.

Check for **+12 V** on the heated rear screen relay, component code **235** on the following connection:
- **AP12** of component **235**.

Check the **continuity** and **insulation** of the following connection:
- **AP12** between components **1016** and **235**.

If the connection or connections are faulty and there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.

Check the **continuity**, the **insulation** to **earth**, and the **absence of interference resistance** on the following connection:
- **15M** between components **645** and **235**.

If the connection is faulty and there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.

If the fault is still present, contact the Techline.

AFTER REPAIR	Follow the instructions. Deal with any other faults. Clear the **stored** faults.

DF162 CONTINUED	

CC.1	***NOTES***	None.

Check the **condition** and the **connection** of the connectors of the heated rear screen relay, component code **235**. If the connectors are faulty and if there is a repair procedure (see **Technical Note 6015A, Repairing electrical wiring, Wiring: Precautions for repair),** repair the connector, otherwise replace the wiring.

Check the **insulation to +12 V** and the **absence of interference resistance** on the following connection:
- **15LP** between components **1016** and **235**.

If the connection is faulty and there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.

If the fault is still present, contact the Techline.

AFTER REPAIR	Follow the instructions. Deal with any other faults. Clear the **stored** faults.

DF177 PRESENT OR STORED	SIREN CIRCUIT CC.1: Short circuit to + 12 V CC.0: Open circuit or short circuit to earth

NOTES	If the vehicle is fitted with an alarm: – Check that the vehicle is configured with an alarm. – Check that **LC020 Factory fitted perimeter protection** is definitely **With**.
	Special note: See **Wiring Diagrams Technical Note for Clio II F6**.

Check the condition and presence of fuse **F12**. Replace the fuse if necessary (see **MR 430, Mechanical, 81C, Fuses, Fuses: List and location of components**).
Check the condition and connection of siren connector, component code **967** (tabs bent, oxidised, broken). If the connector is faulty and there is a repair method (see **Technical Note 6015A, Repairing electrical wiring, Wiring: Precautions for repair**), repair the connector, otherwise replace the wiring.
Check the **insulation**, **continuity** and the **absence of interference resistance** on the following connections: • **67CP** between components **1016** and **967**, • **M** between earth and **967**. If the connection or connections are faulty and there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.
If the fault is still present, contact the Techline.

AFTER REPAIR	Follow the instructions. Deal with any other faults. Clear the **stored** faults.

DF184 **STORED**	IMPACT DETECTED SIGNAL

NOTES	The fault is declared **stored** after an impact is detected.

Perform fault finding on the airbag function (see **88C, Airbags and pretensioners**).
If the fault is still present, contact the Techline.

AFTER REPAIR	Follow the instructions. Deal with any other faults. Clear the **stored** faults.

DF271 PRESENT	UCH INTERNAL ELECTRONIC FAULT

NOTES	**Special notes**: if there is a fault **stored**, check whether there are any other faults present and clear them. Fault declared **present** when the ignition is switched off.

If the fault is still present, contact the Techline.

AFTER REPAIR	Follow the instructions. Deal with any other faults. Clear the **stored** faults.

DF273 PRESENT OR STORED	IMPACT CONNECTION

NOTES	**Special notes:** The fault is **present 8 seconds** after the ignition is switched on and becomes **stored** after the ignition is switched off. **Note:** If this fault is **present**, the door locking function while driving is inhibited.
	Special note: See **Wiring Diagrams Technical Note for Clio II F6**.

Perform fault finding on the airbag function (see **88C, Airbags and pretensioners**).
Check the connection and condition of the UCH connectors, component code **645**. If the connectors are faulty and if there is a repair procedure (see **Technical Note 6015A, Repairing electrical wiring, Wiring: Precautions for repair),** repair the connector, otherwise replace the wiring.
Check the **insulation**, **continuity** and **absence** of interference resistance on the following connection: ● **60BR** between components **645** and **756**. If the connection is faulty and there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.
If the fault is still present, contact the Techline.

AFTER REPAIR	Follow the instructions. Deal with any other faults. Clear the **stored** faults.

NOTES	Only check conformity after a full check with the **diagnostic tool**. The values shown in this conformity check are given as a guide. Application condition: **engine off, ignition on**.

MAIN SCREEN

Function	Parameter or status Checked or action		Display and notes	Fault finding
Engine immobiliser	**ET549:**	Immobiliser active	**YES** **NO**	**In the event of a fault**, apply the interpretation of status **ET549**.
Blank UCH	**ET008:**	Blank UCH	**YES** **NO**	**In the event of a fault**, apply the scenario **SC004 Program UCH**.
Supply	**PR001:**	Battery voltage	**12 V < X < 12.5 V**	**In the event of a fault**, run fault finding on the charging circuit (see **Technical Note 6014A, Checking the charging circuit**).
	ET004:	+ 12V after ignition feed	**YES** **NO**	**In the event of a fault**, apply the interpretation of status **ET004**.
	ET091:	Engine running	**YES** **NO**	**In the event of a fault**, perform a test on the injection computer (see **13B, Diesel injection or 17B, Petrol injection**).
Speed	**PR008:**	Vehicle speed	**X in km/h**	**In the event of a fault**, perform a test on the vehicle speed or ABS computer (see **38C, Anti-lock braking system**).

NOTES	Only check conformity after a full check with the **diagnostic tool**. The values shown in this conformity check are given as a guide. Application condition: **engine off, ignition on**.

FUNCTION: ACCESS - SAFETY

SUB-FUNCTION: ACCESS

Function	Parameter or status Checked or action		Display and notes	Fault finding
Supply	**ET004:**	+ 12V after ignition feed	**YES** **NO**	**In the event of a fault**, apply the interpretation of status **ET004**.
Speed	**PR008:**	Vehicle speed	**X** in **mph (km/h)**	**In the event of a fault**, perform a test on the vehicle speed or ABS computer (see **38C, Anti-lock braking system**).
Opening elements	**ET489:**	Front doors	**Open** when the front doors are open.	**In the event of a fault**, apply the interpretation of status **ET489**.
	ET551:	Rear doors or luggage compartment	**Open** when rear doors or luggage compartment are open.	**In the event of a fault**, apply the interpretation of status **ET551**.
Opening elements	**ET489:**	Front doors	**Closed** when the front doors are closed.	**In the event of a fault**, apply the interpretation of status **ET489**.
	ET551:	Rear doors or luggage compartment	**Closed** when the rear doors or the luggage compartment are closed.	**In the event of a fault**, apply the interpretation of status **ET551**.
Safety	**AC176:**	Alarm siren	This command is used to activate the siren.	**In the event of a fault**, apply the interpretation of command **AC176**.

NOTES	Only check conformity after a full check with the **diagnostic tool**. The values shown in this conformity check are given as a guide. Application condition: **engine off, ignition on**.

FUNCTION: ACCESS - SAFETY

SUB-FUNCTION: STARTING

Function	Parameter or status Checked or action		Display and notes	Fault finding
Supply	**ET004:**	+ 12V after ignition feed	**YES** **NO**	**In the event of a fault**, apply the interpretation of status **ET004**.
Opening elements	**ET183:**	Key already programmed for the vehicle	**YES** **NO**	**In the event of a fault**, apply the interpretation of status **ET183 (see 82D, Access - Security**).
	ET184:	Valid key code	**YES** when the ignition is switched on **NO** if the ignition is not switched on	**In the event of a fault**, apply the interpretation of status **ET184 (see 82D, Access - Security**).
Engine immobiliser	**ET549:**	Immobiliser active	**NO when the + after ignition is switched on** **YES when the key is not in the ignition switch**	**In the event of a fault**, apply the interpretation of status **ET549**.
Immobiliser warning light	**ET127:**	Immobiliser warning light	**OFF when the + after ignition is switched on.** **ILLUMINATED when the key is not in the ignition switch.**	**In the event of a fault**, apply the interpretation of status **ET127**.

NOTES	Only check conformity after a full check with the **diagnostic tool**. The values shown in this conformity check are given as a guide. Application condition: **engine off, ignition on**.

FUNCTION: ACCESS - SAFETY

SUB-FUNCTION: STARTING (continued)

Function	Parameter or status Checked or action		Display and notes	Fault finding
Key	**PR056:**	Number of keys allocated	**1 to 4**	**In the event of a fault**, apply the interpretation of status **PR056 (see 82D, Access - Security**).
	ET185:	Key code received	**YES** when the ignition is switched on **NO** if the ignition is not switched on	**In the event of a fault**, apply the interpretation of status **ET185 (see 82D, Access - Security**).
Engine immobiliser	**AC003:**	Immobiliser warning light	This command is used to illuminate the immobiliser warning light	**In the event of a fault**, apply the procedure for dealing with command **AC003**.
De-icing	**ET547:**	Heated rear screen button	**PRESSED** when the heated rear screen button is pressed. **RELEASED** if the heated rear screen button is not pressed.	**In the event of a fault**, apply the interpretation of status **ET547.**

Tool status	Diagnostic tool title
ET004	+ 12 V after ignition feed
ET008	Blank UCH
ET127	Immobiliser warning light
ET489	Front doors
ET547	Heated rear screen button
ET549	Immobiliser active
ET551	Rear doors or luggage compartment

ET004	+ 12 VOLTS AFTER IGNITION

NOTES	**Special note:** See **Wiring Diagrams Technical Note for Clio II F6**.

ET004: "NO" with the ignition on

Check fuse **F04** in the passenger compartment fuse box, component code **1016** (see **MR 430, Mechanical, 81C, Fuses, Fuses: List and location of components**).
Using a multimeter, check for **+ 12 V** after ignition on connection **AP10** of the UCH connector, component code **645**.
Using a multimeter, check for **+ 12 V** on connection **BP56** of the UCH connector, component code **645**.
If the connection or connections are faulty and there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.

If there is no voltage, check **the continuity** and the **insulation** to **earth** on the following connection:
- **AP10** between components **645** and **1016**.

If the connection is faulty and there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.

AFTER REPAIR	Follow the instructions. Deal with any other faults. Clear the **stored** faults.

ET004 CONTINUED	

ET004: "YES" with the ignition off

Using a multimeter, check that there is no **+12 V** on connection **BP56** of the UCH connector, component code **645**.
Using a multimeter, check that there is no **+ 12 V** with the ignition off on connection **AP10** of the UCH connector, component code **645**.
If the connection or connections are faulty and there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.

If the fault is still present, contact the techline.

AFTER REPAIR	Follow the instructions. Deal with any other faults. Clear the **stored** faults.

ET127	IMMOBILISER WARNING LIGHT

NOTES	The immobiliser warning light status should be **OFF** after the + after ignition feed is switched on. The immobiliser warning light status should be **ON** when the key is not in the ignition switch.
	Special note: See **Wiring Diagrams Technical Note for Clio II F6**.

Check the connection and condition of the instrument panel connector, component code **247**. If the connector is faulty and there is a repair method (see **Technical Note 6015A, Repairing electrical wiring, Wiring: Precautions for repair**), repair the connector, otherwise replace the wiring.
Check the connection and condition of the UCH connector, component code **645.** If the connector is faulty and there is a repair method (see **Technical Note 6015A, Repairing electrical wiring, Wiring: Precautions for repair**), repair the connector, otherwise replace the wiring.
Using a multimeter, check **the continuity** and **insulation** of the following connection: ● **80T** between components **645** and **247**. If the connection is faulty and there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.
If the fault is still present, contact the techline.

AFTER REPAIR	Follow the instructions. Deal with any other faults. Clear the **stored** faults.

ET489	FRONT DOORS

NOTES	Check that no fault is **present**. Open the front doors one after another.
	Special note: See **Wiring Diagrams Technical Note for Clio II F6**.

Check that, for each front door open, status **ET489** is **OPEN** or for each front door closed, the status is **CLOSED**.
Check the connection and wiring of the driver's door rabbet switch, component code **180** and the passenger's door rabbet switch, component code **181**. If the connectors are faulty and if there is a repair procedure (see **Technical Note 6015A, Repairing electrical wiring, Wiring: Precautions for repair),** repair the connector, otherwise replace the wiring.
Check the **continuity** and **insulation** of the following connections: ● **13S** between components **180** and **645**, ● **13S** between components **181** and **645**, ● **M** between component **180** and **earth**, ● **M** between component **181** and **earth**. If the connection or connections are faulty and there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.
Check **the continuity** between the two connections of the door rabbet switches. Pull the handle to open the lock and check that there is no longer any continuity between the two connections. Check that the lock engages into the striker plate properly.
If the fault is still present, contact the techline.

AFTER REPAIR	Follow the instructions. Deal with any other faults. Clear the **stored** faults.

ET547	HEATED REAR SCREEN BUTTON

NOTES	There must be no **present** or **stored** faults.
	Special note: See **Wiring Diagrams Technical Note for Clio II F6**.

Check the condition and connection of the connector on the heated rear screen button, component code **1456** (tabs bent, broken, etc.). If the connector is faulty and there is a repair method (see **Technical Note 6015A, Repairing electrical wiring, Wiring: Precautions for repair**), repair the connector, otherwise replace the wiring.
Check the **earth** on connection **M** of the connector on the heated rear screen button, component code **1456**. If the connection is faulty and there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.
Check the condition and connection of the UCH connector, component code **645** (tabs bent, broken, etc.). If the connector is faulty and there is a repair method (see **Technical Note 6015A, Repairing electrical wiring, Wiring: Precautions for repair**), repair the connector, otherwise replace the wiring.
Check the **insulation, continuity** and **absence of interference resistance** on the following connection: ● **15B** between components **1456** and **645**. If the connection is faulty and there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.
If the fault is still present, replace the heated rear screen button (see **MR 430 Mechanical, 84A, Controls - Signals, Heated rear screen button: Removal - Refitting**).
If the fault is still present, contact the techline.

AFTER REPAIR	Follow the instructions. Deal with any other faults. Clear the **stored** faults.

ET549	ENGINE IMMOBILISER ACTIVE

NOTES	The immobiliser active status should change to **inactive** when the + after ignition is switched on. The immobiliser status should be **active** when the key is absent from the ignition switch.

ET549: **YES** despite the presence of a key in the ignition switch and + after ignition feed

Check that status **ET004 + 12 V After ignition** is **YES** with the ignition on.
Deal with status **ET004** if it is **NO** with the ignition on by first checking the conformity of **ET004**, **ET184** and **ET185**.

Check status **ET185 Key code received** and status **ET184 Key code valid** with the ignition on.
If status **ET185** and **ET184** are **YES**, run fault finding on the injection computer (see **13B, Diesel injection** or **17B, Petrol injection**).
If status **ET185** is **NO**, deal with this status first.
If status **ET185** is **YES** and status **ET184** is **NO**, deal with status **ET184** first.

If the fault is still present, contact the techline.

AFTER REPAIR	Follow the instructions. Deal with any other faults. Clear the **stored** faults.

ET551	REAR DOORS OR LUGGAGE COMPARTMENT

NOTES	Check that no fault is **present**. Open the rear doors one after another, then open the luggage compartment.
	Special note: See **Wiring Diagrams Technical Note for Clio II F6**.

Check that when a rear door or the luggage compartment is opened, status **ET551** is **OPEN** and that, with the rear doors or luggage compartment closed, status **ET551** is **CLOSED**.

Check the connection and wiring of the rabbet switch on the rear right-hand door, component code **178**, the rabbet switch on the rear left-hand door, component code **179** and the luggage compartment switch, component code **154** (if present).
If the connectors are faulty and if there is a repair procedure (see **Technical Note 6015A, Repairing electrical wiring, Wiring: Precautions for repair),** repair the connector, otherwise replace the wiring.

Check **the continuity** and **insulation** of the following connections:
- **13N** between components **179** et **645**,
- **13N** between components **178** et **645**,
- **13N** between components **154** et **645**,
- **M** between component **179** and **earth**,
- **M** between component **178** and **earth**,
- **M** between component **154** and **earth**,

If the connection or connections are faulty and there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.

Check **the continuity** between the two connections of the rabbet switches for the doors and the luggage compartment.
Pull the handle to open the lock and check that there is no longer any continuity between the two connections.
Check that the lock engages into the striker plate properly.

If the fault is still present, contact the techline.

AFTER REPAIR	Follow the instructions. Deal with any other faults. Clear the **stored** faults.

Tool command	Diagnostic tool title	Comments
AC003	Immobiliser warning light	See interpretation of the command.
AC176	Alarm siren	See interpretation of the command.
VP004	Write VIN	See interpretation of the command.
SC004	UCH programming	See interpretation of the command.
SC008	Type of UCH	See interpretation of the command.
RZ001	Fault memory	Use this command to clear the faults stored in the computer.

AC003	IMMOBILISER WARNING LIGHT

NOTES	There must be no present or stored faults. Activate the command and note whether the warning light illuminates **(3 seconds)**.
	Special note: See **Wiring Diagrams Technical Note for Clio II F6**.

Check the **connection** and **condition** of the instrument panel connector, component code **247**. If the connector is faulty and there is a repair method (see **Technical Note 6015A, Repairing electrical wiring, Wiring: Precautions for repair**), repair the connector, otherwise replace the wiring.
Check the **connection** and **condition** of the UCH connector, component code **645**. If the connector is faulty and there is a repair method (see **Technical Note 6015A, Repairing electrical wiring, Wiring: Precautions for repair**), repair the connector, otherwise replace the wiring.
Using a multimeter, check **the continuity** and **insulation** of the following connection: ● **80T** between components **645** and **247**. If the connection is faulty and there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.
If the fault is still present, contact the techline.

AFTER REPAIR	Carry out a road test, followed by a check with the **diagnostic tool**.

VP004	ENTERING THE VIN

NOTES	This command permits manual entry of the vehicle's VIN into the computer. Use this command each time the computer is replaced. **The vehicle identification number is indicated on the manufacturer's plate on the right-hand side door pillar.**

Procedure for writing the VIN
- establish dialogue with the UCH,
- select the **repair mode** menu,
- select the **other settings** menu,
- select line **VP004 Write VIN**,
- enter the VIN twice,
- exit fault finding mode,
- switch off the ignition,
- wait for the end of power latch,
- re-read the VIN using **ID019 VIN Code** in the **Identification** menu for confirmation.

AFTER REPAIR	Carry out a road test, followed by a check with the **diagnostic tool**.

SC004	PROGRAMMING THE UCH

Equipment required
CLIP

Use this command only with a new and blank UCH.

A new UCH has no immobiliser code and is therefore not assigned to the vehicle; once it is fitted on the vehicle, it must be programmed to assign it to the vehicle.

To carry out this programming, always use **a key belonging to the vehicle** (allocated to the old UCH).

Before starting this operation, make sure that there are no components capable of interfering with the electromagnetic field (e.g.: CB (Citizen Band), mobile phone, etc.).

Note:
After only the UCH has been replaced, there are no operations to be performed on the injection computers.
The computers keep the same immobiliser code.

IMPORTANT
When the UCH programming procedure is successfully completed, the UCH is no longer blank and is permanently assigned to the vehicle. It will not work on another vehicle.

IMPORTANT
When the programming operation is complete, only remove the key once the **Programming complete** message is displayed on the screen. Otherwise, programming fails and the UCH can no longer be used.

AFTER REPAIR	Repeat the conformity check from the start.

SC004 CONTINUED	

IMPORTANT
Do not interrupt the procedure when it is in progress.
If it is interrupted, restart the procedure in "not connected mode"; a new programming key will be displayed.

UCH programming procedure

- Establish dialogue with the UCH.
- Select the **Repair mode** menu.
- Select the **Programming** menu.
- Select line **SC004 Program UCH**.

Follow the instructions on the **CLIP diagnostic tool**.
In "not connected" mode, when **the Clip diagnostic tool** displays the programming key, make a note of this key and the VIN.
To obtain the immobiliser code, see **Technical Note 5037A, Code delivery procedure**.

IMPORTANT
In "not connected" mode, the programming key can only be used for a limited amount of time, as indicated by the **Clip diagnostic tool**.
After this time, the programming key and associated immobiliser code are no longer valid. The operation must be restarted from the beginning.

Operations to be carried out after programming the UCH

Enter the vehicle's VIN into the computer using command **VP004 Enter VIN**.
After programming the UCH, allocate all the keys using command **SC015 Allocate key**.
Configure the equipment that is present or not on the vehicle using command **SC008 UCH type**.

AFTER REPAIR	Repeat the conformity check from the start.

SC008	UCH TYPE

Equipment required
CLIP

This procedure will enable the UCH to be configured in relation to the vehicle to provide optimum running.
– Click on the **Repair** mode and in the **Programming** menu,
– confirm line **SC008 UCH type**,
– follow the procedure and enter the vehicle equipment,
– check that the options configured are those desired and finish.

AFTER REPAIR	Repeat the conformity check from the start.

NOTES	**Only refer to the customer complaints after performing a complete check using the diagnostic tool.**

DIALOGUE FAULT	**87B**
No dialogue with the computer	**ALP 1**

LIGHTING	**80D**
The direction indicator lights do not work	**ALP 2**
Side lights do not operate	**ALP 3**
No dipped headlights	**ALP 4**
No main beam headlights	**ALP 5**
No front fog lights	**ALP 6**
No rear fog light	**ALP 7**
The glovebox light does not work	**ALP 8**
The luggage compartment lighting does not work	**ALP 9**
The brake lights operate erratically	**ALP 10**
The brake lights are still illuminated and the brake light switch is released	**ALP 11**
The reversing lights operate erratically	**ALP 12**
The flashing light of the hazard warning lights control button does not work	**ALP 13**
The backlighting of the hazard warning lights control button operates erratically	**ALP 14**
The front fog lights are always illuminated	**ALP 15**
The timed courtesy light does not work	**ALP 16**

ACCESS - SAFETY	82D
The vehicle will not start	→ ALP 19
The backlighting of the opening elements locking / unlocking button operates erratically	→ ALP 20
The electric door locking/unlocking control operates erratically	→ ALP 21

DE-ICING	87B
Heated rear screen does not operate	→ ALP 6

ALP1	No dialogue with the computer

NOTES	**Special note:** See **Wiring Diagrams Technical Note for Clio II F6**.

Test the **diagnostic tool** on another vehicle which is in perfect working order.

Check:
– the connection between the **diagnostic tool** and the diagnostic socket, component code **225** (cable in good condition),
– the engine and passenger compartment fuses (see **MR 430, Mechanical, 81C, Fuses, Fuses: List and location of components**).

Check for **+12 V** before ignition on the following connection:
- **BP10** of component **225**.

Check for **+12 V** after ignition on the following connection:
- **AP10** of component **225**.

Check for an earth on the following connections:
- **M** and **N** of component **225**.

If the connection or connections are faulty and there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.

AFTER REPAIR	Check the system operation.

ALP1 CONTINUED	

Check the **continuity**, **insulation** and the **absence of interference resistance** on the following connection:

- **HK** between components **225** and **645**.

If the connection or connections are faulty and there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.

Connect the bornier and check the **insulation**, **continuity** and **absence of interference resistance** on the following connections:

- **BP56** between components **645** and **1016**,
- **AP7** between components **645** and **1016**,
- **M** between component **645** and **earth**.

If the connection or connections are faulty and there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.

AFTER REPAIR	Check the system operation.

ALP6	Heated rear screen not working

NOTES	**Only consult this customer complaint after a complete check with the diagnostic tool.**
	Special note: See **Wiring Diagrams Technical Note for Clio II F6**.

Check the presence and the condition of the supply fuses of the heated rear screen relay, component code **235**:

- **F20** and **F13** on component **1016**.

Replace the fuse(s) if the checks are not correct (see **MR 430, Mechanical, 81C, Fuses, Fuses: List and location of components**).

Check the **condition** and the **connection** of the connector of the heated rear screen relay, component code **235** and of the heated rear screen contact, component code **200**.
If the connectors are faulty and if there is a repair procedure (see **Technical Note 6015A, Repairing electrical wiring, Wiring: Precautions for repair),** repair the connector, otherwise replace the wiring.

Check for **+12 V** on the heated rear screen relay, component code **235** on the following connections:
- **AP12** between components **1016** and **235**,
- **15LP** between components **1016** and **235**,

Check **the continuity** and **insulation** of the following connections:
- **AP12** between components **1016** and **235**,
- **15LP** between components **1016** and **235**.

If the connection or connections are faulty and there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.

AFTER REPAIR	Check the system operation.

ALP6 CONTINUED	

Check for **earth** on the heated rear screen, component code **200** on the following connection:
- **M** of component **200**.

If the connection is faulty and there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.

Check **the continuity** and **insulation** of the following connections:
- **15LP** between components **235** and **200**,
- **M** between earth and component **200**.

If the connection or connections are faulty and there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.

If the fault is still present, refer to **MR 430, Mechanical, 84A, Controls – Signals, Heated rear screen: Repair**.

If the fault is still present, contact the techline.

AFTER REPAIR	Check the system operation.