TWINGO

Technical Note 3594A

X06 X

FAULT FINDING
UCH

PROGRAM N°: 400
VDIAG N°: 04, 0F

77 11 310 062 **MAY 2010** **EDITION ANGLAISE**

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This document presents the general fault finding method applicable to all computers for the immobiliser function on TWINGO vehicles with all engine types.

To carry out fault finding on this system, it is essential to have the following items:

- the Workshop Repair Manual for the vehicle concerned,
- the wiring diagram of the function for the vehicle concerned,
- the tools listed in the Special tooling required column.

GENERAL APPROACH TO FAULT FINDING:

- Use one of the diagnostic tools to identify the system fitted to the vehicle (to read the computer group, the program N°, the Vdiag, etc.).

- Locate the Fault finding documents corresponding to the system identified.

- Include information contained in the introductory sections.

- Read the faults stored in the computer memory and use the Interpretation of faults section of the documents.
  Reminder: each fault is interpreted for a particular type of storage (fault present, fault stored in memory, fault present or stored). The checks defined for dealing with each fault are therefore only to be performed if the fault declared by the diagnostic tool is interpreted in the document for its type of storage. The storage type should be considered when using the diagnostic tool after the ignition has been switched off and switched back on.
  If a fault is interpreted when it is declared as stored, the conditions for applying fault finding appear in the NOTES box. If the conditions are not satisfied, use the fault finding strategy to check the circuit of the faulty part since the fault is no longer present on the vehicle. Perform the same operation when a fault is declared as stored by the diagnostic tool but is only interpreted in the documentation as a present fault.

- Perform the conformity check (appearance of possible incorrect operations not yet stated by the system's self diagnosis procedure) and apply the associated fault finding strategy according to results.

- Confirm the repair (customer complaint disappears).

- Use the fault finding procedure for each Customer complaint if the fault persists.

SPECIAL TOOLING REQUIRED:
- Diagnostic tool (except XR25).
- Bornier.
- Multimeter.

OPERATION

When the immobiliser system is operational, the engine immobiliser indicator light flashes slowly: (once per second).

After the ignition is switched on, the key code is transmitted to the UCH.

If the code is recognised by the UCH, the UCH and the injection computer send coded signals to each other via the multiplex network and turn off the immobiliser indicator light.

If the signals transmitted by the UCH and the injection computer match, the UCH authorises the engine to start and the injection is unlocked.

SPECIAL CASES

The injection computer has no reference code in its memory: the code which is transmitted is stored.

If the key code and the UCH code do not match, the system remains locked. The engine immobiliser red indicator light flashes (quickly). The vehicle cannot be started.

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

Recognition of keys in normal operation

	IMMOBILISER WARNING LIGHT
Vehicle protected (without After Ignition)	Warning light flashes at **1 Hertz**
Key recognised, injection protection lifted	Warning light comes on for **3 seconds** then goes out
Key recognised, injection protected or blank	After **3 seconds**, warning light remains on
Key not recognised	Warning light flashes at **4 Hertz**

GENERAL INFORMATION

The UCH replaces the decoder unit.

The UCH is located in the dashboard on the driver's side.

WARNING

When replacing the UCH, it is necessary to configure the functions corresponding to the vehicle's equipment level using diagnostic tools.

WARNING

It is not possible to start if the immobiliser programming has not been carried out.

When replacing the UCH, it is necessary to carry out the programming and configuration corresponding to the vehicle's equipment level.

If you are fitting or replacing a transmitter, it is necessary to reallocate the key.

Features of the system

- This system can function with up to 4 remote control units (the UCH can only manage 4 different codes).
- The radio frequency signal receiver is integrated in the UCH.
- The central door locking button is blocked once the doors have been locked by the remote control.
- The locking and unlocking of the doors with the remote control can be detected visually by the hazard warning lights flashing (if all the doors are closed properly):
  – locking:1 flash
  – unlocking: 2 flashes
- If the doors are unlocked and none of the doors are open in the next 30 seconds, the system will automatically lock the vehicle doors (without the hazard lights flashing).
- The UCH controls the vehicle interior lighting. If a courtesy light is left on unintentionally, the UCH will cut the light supply after approximately 30 minutes.
- The **Top of the range** version dims the light progressively after the doors have been closed by radio frequency remote control.
- The UCH turns on the hazard warning lights if the **impact connection** signal is received from the air bag computer.
- Spare keys are supplied without a code or a number.
- It is possible in the event of a key being stolen or lost or at the customer's request, for a vehicle key to be de-allocated. It can be reassigned to the same vehicle if necessary.

IMPORTANT:

- **With this system, it is not possible to replace the UCH or the keys at the same time. These parts are sold uncoded.**
- **There is no way of deleting the code programmed by the system components (UCH and injection computer). The programmed code cannot be erased.**

REPLACEMENT AND CONFIGURATION

New parts are not coded. Once fitted on the vehicle, they must be programmed with a code to become operational.

To perform this procedure, it is essential that some parts on the vehicle are already correctly coded (with the vehicle code).

Refer to the allocation table.

IMPORTANT: If a part is programmed with a code, the part is then allocated to the vehicle and the code cannot be erased nor can the part be programmed with a second code. **The programmed code cannot be erased**.

ALLOCATION TABLE

AFTER-SALES OPERATION	STATUS OF COMPONENTS			REPAIR CODE NEEDED
	UCH	Key	Injection computer	
Programming the UCH	Blank	Coded	Coded	YES
Key allocation or cancellation	Coded	Blank*	-	YES
Programming the injection computer	Coded	Coded	Blank	NO

* A key assigned to a vehicle must be blank or already programmed to this vehicle.

NOTE: a key may be programmed to a vehicle but not operational (unassigned).

IMPORTANT: only keys presented during this procedure will work.

A new UCH is not programmed with a code. You must therefore program a code into a new UCH fitted to a vehicle to make the UCH operational.

To perform this procedure, at least one of the vehicle's old keys and the repair code are required and the injection computer must be correctly coded (refer to the allocation table).

IMPORTANT: if a code is programmed into the UCH, it is allocated to the vehicle. It is impossible to erase the code or program in another one.

WARNING: only keys presented during this procedure will work if:
– they have already been coded on this vehicle,
– or they are new (not coded).

NOTE: When only the UCH is replaced, there is no operation to perform on the injection computer, as it retains the same immobiliser code.

UCH PROGRAMMING PROCEDURE

Using the diagnostic tool:
Establish dialogue with the **Engine immobiliser** system.
In the **Command**, **Specific command** menu, select and confirm the **SC027: program UCH** line.

The tool displays **Remove the key from the anti-theft switch**,

The tool displays **Please enter the After-Sales code**. With the ignition off, enter the secret After-Sales code (12 hexadecimal digits) and press confirm.

If the code format is correct, the tool displays **Insert a key which has already been programmed to the vehicle** and the programming procedure starts.

The tool displays **UCH programming completed, please start key programming procedure**, the UCH is coded. You must now enter key programming mode to allocate the other keys (maximum of four). Several seconds may elapse before this message appears.

IMPORTANT: the maximum time lapse between each operation is **5 minutes**, otherwise the procedure is cancelled.

SPECIAL CASES

If the screen displays:

The After-Sales code entered does not correspond with the key inserted. Check that you have entered the correct code and that you have inserted a key for the vehicle: the code does not match the key or the key does not belong to the vehicle.

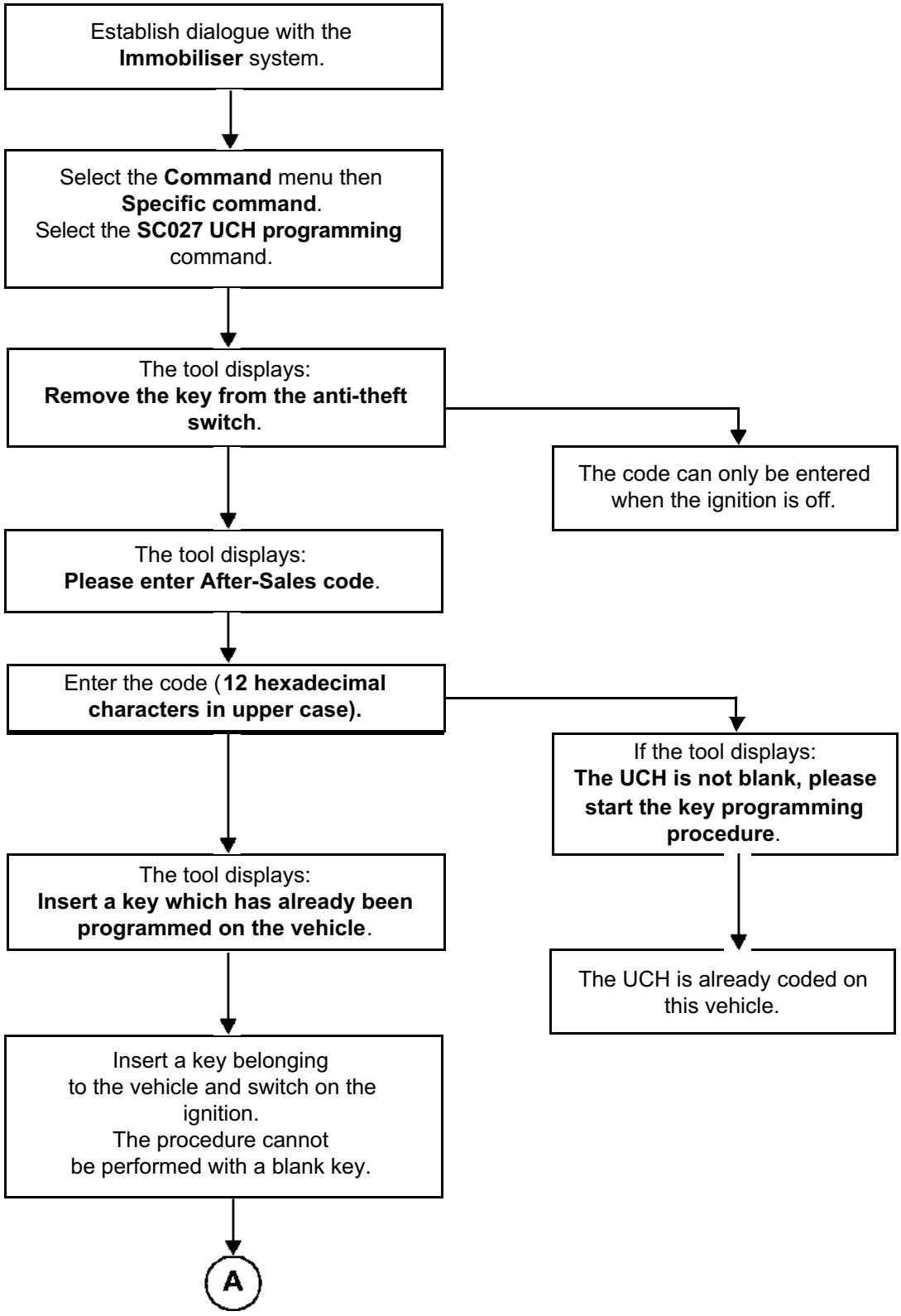
The UCH is not blank. Please start the key programming procedure: The UCH has already been programmed for this vehicle.

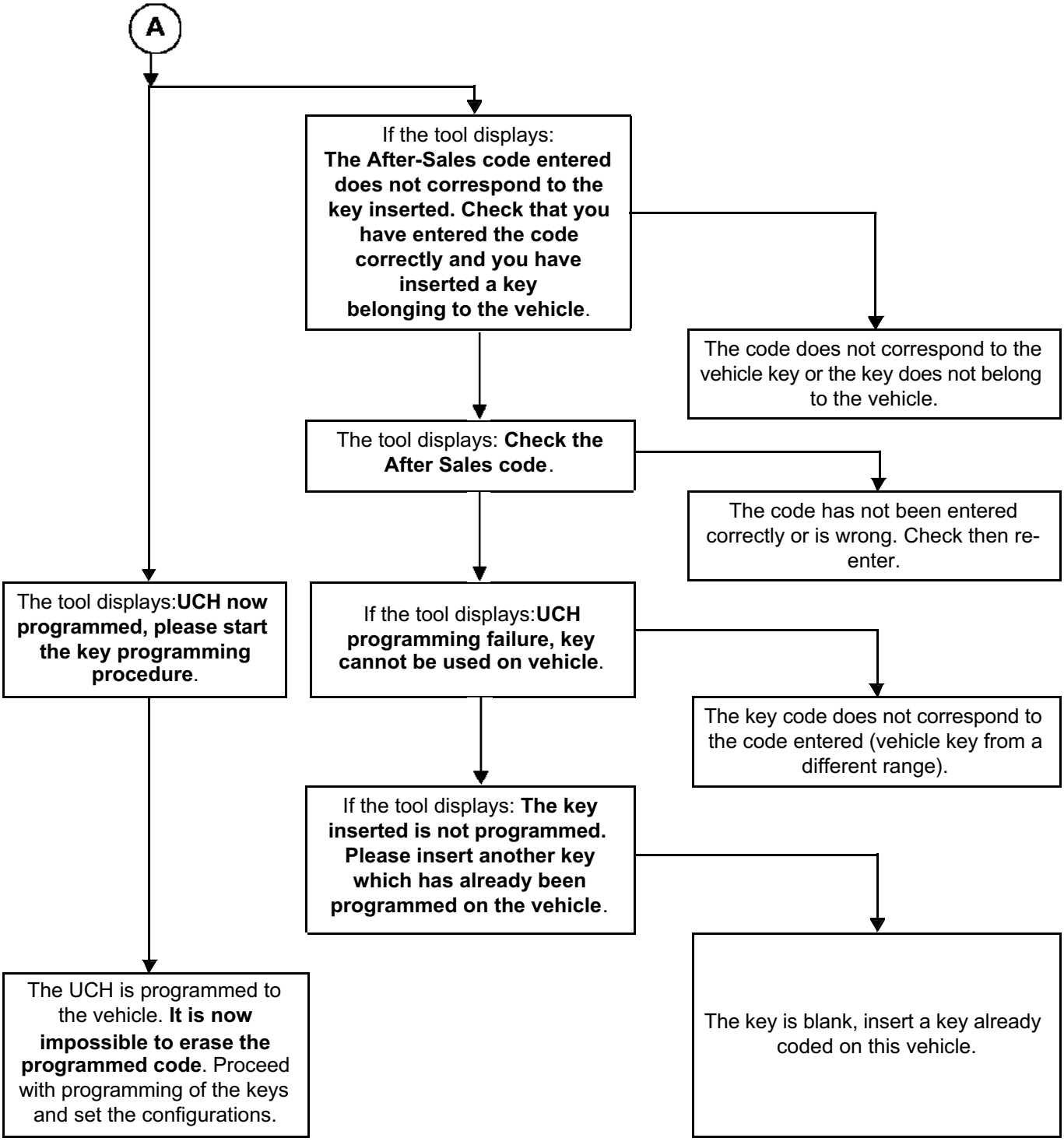
Check the After-Sales code: the code entered is incorrect. Check, then try entering the data again,

UCH programming failure, key cannot be used on this vehicle: the key code does not correspond to the code entered (the key belongs to a vehicle from a different range).

The key inserted is blank. Please present another key which has already been programmed to this vehicle: the key is blank, present a key which has already been coded on this vehicle.

UCH PROGRAMMING PROCEDURE




A
If the tool displays: **The After-Sales code entered does not correspond to the key inserted. Check that you have entered the code correctly and you have inserted a key belonging to the vehicle**.
The code does not correspond to the vehicle key or the key does not belong to the vehicle.
The tool displays: **Check the After Sales code**.
The code has not been entered correctly or is wrong. Check then re-enter.
The tool displays:**UCH now programmed, please start the key programming procedure**.
If the tool displays:**UCH programming failure, key cannot be used on vehicle**.
The key code does not correspond to the code entered (vehicle key from a different range).
If the tool displays: **The key inserted is not programmed. Please insert another key which has already been programmed on the vehicle**.
The UCH is programmed to the vehicle. **It is now impossible to erase the programmed code**. Proceed with programming of the keys and set the configurations.
The key is blank, insert a key already coded on this vehicle.

KEY ALLOCATION PROCEDURE IMPORTANT: in the event that not all the keys are available, it will be necessary to carry out a reprogramming procedure later with all the keys.

Establish dialogue with the **Engine immobiliser** system.

In the **Command, Specific command**, validate the **SC028: Card / key programming** line.

The tool displays **Remove the key from the anti-theft switch**,

The tool displays **Please enter the After-Sales code**.

With the ignition off, enter the secret After-Sales code (12 hexadecimal digits) and press confirm.

The tool displays **Important: keys not inserted will no longer be operational. Restart the procedure to reallocate them**: programming is in progress.

The tool displays **Insert the key in the anti-theft switch and turn on the ignition, then press Enter**: switch on the ignition with a key from the vehicle or a blank key.

The screen displays **1 key programmed**, then press **Enter**, then **remove the key from the ignition switch**.

The tool asks: **Would you like to program another key?**

To assign additional keys, switch on the ignition for a few seconds with the other vehicle keys to be programmed (four maximum), then press enter.

The screen displays **2, 3 or 4 keys programmed** then **remove the key from the anti-theft switch**.
IMPORTANT: these must be old keys for the vehicle or new non-coded keys.

The tool displays **Writing data to memory**, the UCH is coded and the keys are programmed.
Several seconds will elapse before this message appears, in order to exit the reallocation mode.

IMPORTANT: the maximum time lapse between each operation is **5 minutes**, otherwise the procedure is cancelled. The screen displays the message **Procedure interrupted. Important: the keys assigned to the vehicle are the ones assigned before the procedure was started. The keys submitted before interruption of the procedure are no longer blank and can only be assigned to this vehicle**. This message also appears where dialogue with the UCH is lost or the battery power supply fails.

SPECIAL CASES

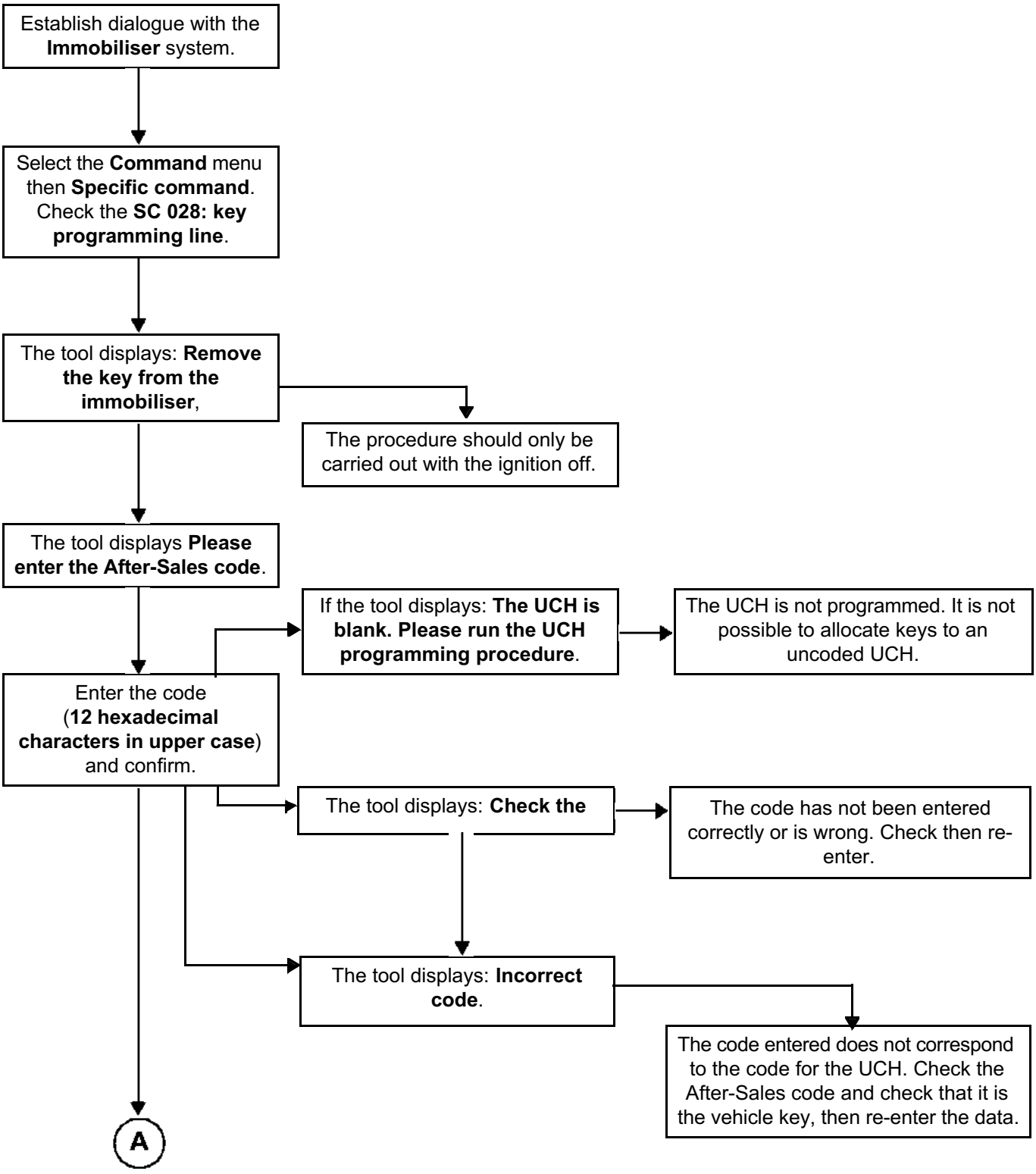
If the screen displays:

The UCH is blank. Please run the UCH programming procedure: the UCH is blank. It is impossible to allocate keys to an uncoded UCH.

Check the After-Sales code: the code entered is incorrect. Check, then try entering the data again,

If the key does not correspond to the vehicle UCH, the tool will display **Procedure interrupted. Important: the keys assigned to the vehicle are the ones assigned before the procedure was started. The cards inserted before the procedure was interrupted are no longer blank and may only be allocated to this vehicle.**

KEY PROGRAMMING PROCEDURE



The tool displays: **Important, keys inserted will no longer be operational. Restart the procedure to reallocate them**.

This procedure allows you to unallocate a key if it is lost, for example.

The tool displays: **Insert the key in the immobiliser switch and switch on the ignition, then confirm**.

Insert a key into the anti-theft switch. The key must be not be programmed or belong to the vehicle.

If the tool displays: **Procedure interrupted. Important: the keys assigned to the vehicle are those that were assigned before the procedure was started. The keys submitted before the procedure was interrupted are no longer blank and can only be assigned to this vehicle**.

The key does not correspond to the vehicle UCH.

The tool displays: **One key programmed, Remove the programmed key from the immobiliser switch**.

The tool displays: **Would you like to program another card**?

Insert another blank key or one belonging to the vehicle into the anti-theft switch.

The tool displays: **2, 3 or 4 keys programmed** then **Remove the key from the immobiliser switch**.

The vehicle can use up to 4 keys.

The tool displays: **Writing data to memory**.

The keys are programmed to the vehicle. Check the vehicle starting and central door locking with all the keys.

CODING THE INJECTION COMPUTER

The injection computer is supplied uncoded. It therefore has to be programmed with the engine immobiliser code when it is installed to allow the vehicle to be started.

Simply switch on the ignition for a few seconds without starting the engine. Switch the ignition off, the immobiliser will be activated after a few seconds (engine immobiliser red indicator light flashes).

IMPORTANT:
With this engine immobiliser, the vehicle keeps its immobiliser code for life. In addition, this system does not have a security code. Consequently, it is forbidden to carry out tests with injection computers borrowed from stores and subsequently returned. The programmed code cannot be erased.

DF055 PRESENT OR STORED	CODED LINE CIRCUIT

NOTES	**Conditions for applying the fault finding procedure to stored faults:** – The fault is declared present when the ignition is switched on (+ after ignition).

Check the connection and condition of the instrument panel connector. Repair the connector if necessary.
Check the connection and condition of the UCH **40-track EH1 connector**. Repair the connector if necessary.
Check the **continuity and insulation** of the connection between: UCH 40-track EH1 connector **track B36** ⟶ injection computer (refer to the electrical diagram for the engine concerned) Repair if necessary.

AFTER REPAIR	Deal with any other faults. Clear the fault memory.

DF069 PRESENT OR STORED	DECODER CONNECTION ---> RING CC.0 : Short circuit to earth CC.1 : Short circuit to + 12 volts

NOTES	**Conditions for applying the fault finding procedure to stored faults:** – The fault is declared present when the ignition is switched on (+ after ignition).

CC.0	Check the connection and the condition of the transponder aerial connector. Repair the connector if necessary.
	Check the connection and condition of the UCH **40-track EH1 connector**. Repair the connector if necessary.
	Disconnect the transponder ring connector and ensure that it is correctly supplied with **+ 12 V** on **track 3**. Repair if necessary.
	Check the **continuity and insulation** of the connection between: fuse box, interior lighting fuse **(10 A)** ⟶ **track 3** transponder ring Repair if necessary.

CC.1	Check the connection and condition of the transponder ring connector. Repair the connector if necessary.
	Check the connection and condition of the UCH **40-track EH1 connector**. Repair the connector if necessary.
	Check **the continuity** of the connections: **earth** ⟶ **track 2** transponder ring UCH 40-track EH1 connector **track A16** ⟶ **track 4** transponder ring Repair if necessary.

AFTER REPAIR	Follow the instructions. Deal with any other faults. Clear the fault memory.

NOTES	Only carry out this conformity check after having performed a complete check with the diagnostic tool. The values indicated in this conformity check are given as examples. Test conditions: **engine stopped, ignition on**.

Order	Function	Parameter or status Check or action	Display and notes	Fault finding
1	Power supply	**PR002:** Battery voltage	**12 V < X < 12.5 V**	**If there is a problem:** carry out a fault finding test on the charge circuit.
		ET154: Presence of **+ 12 volts** after ignition	**YES**	**In the event of a fault:** consult the fault finding procedure for status **ET154**.
2	Engine immobiliser	**PR065:** Number of programmed transponder	**2 keys** on leaving the factory, programming of up to **4 keys** by After-Sales	**None.**
		ET103: Key code received	Status **YES** when ignition switched on	**In the event of a problem:** consult the fault finding procedure for status **ET103.**
		ET104: Key code valid	Status **YES** when ignition switched on	**In the event of a problem:** consult the fault finding procedure for status **ET104.**
		ET153: Immobiliser active	**NO**	**In the event of a problem:** consult the fault finding procedure for status **ET153.**
		ET167: Immobiliser indicator light	**OFF**	**In the event of a problem:** apply the **fault finding procedure** for the immobiliser warning light fault **DF105**.

NOTES	Only carry out this conformity check after having performed a complete check with the diagnostic tool. The values indicated in this conformity check are given as examples. Test conditions: **engine stopped, ignition on**.

Order	Function	Parameter or status Check or action	Display and notes	Fault finding
3	Programming:	**ET178:** UCH not programmed	**NO**	If the UCH not programmed status = **YES see programming procedure**.

STATUS TEST

By checking specific statuses, it is possible to determine the fault on a vehicle by means of the various pieces of information provided.

ET154: + 12 volts after ignition present
ET103: Key code received
ET104: Key code valid
ET153: Immobiliser active

If ET 154 status active ET103 status YES ET104 status YES ET153 status NO	– Check the injection with the tool and check whether the injection computer is locked. – Check for problems on the multiplex network.
If ET 154 status active ET103 status YES ET104 status NO ET153 status NO	– The coded key does not belong to the vehicle. – If the key belongs to the vehicle, then carry out reassignment of the keys. – If the key still does not work, replace the key.
If ET 154 status active ET103 status NO ET104 status NO ET153 status NO	– The key is out of service or does not correspond to the make of vehicle.

ET153	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.

ET153 ACTIVE despite the presence of a key in the ignition switch and + after ignition

Check there is no fault before dealing with this status.
Check that status **ET154 12 v after ignition** is **ACTIVE** with the ignition on. Deal with status **ET154** if it is **INACTIVE** with the ignition on.
Check that status **ET103 key code received** and status **ET104 Key code valid** with ignition on. If status **ET103** and **ET104** are **YES,** carry out a fault finding procedure on the injection computer. If status **ET103** is **NO**, deal with this status first. If status **ET103** is **YES** and status **ET104** is **NO**, deal with **ET104** first.

AFTER REPAIR	Carry out another fault finding check on the system. Deal with any other faults. Clear the stored faults.

ET154	PRESENCE + 12 VOLTS AFTER IGNITION

NOTES	**None.**

ET154 INACTIVE, ignition on

Check fuse **F27 (20A)** in the passenger compartment unit.
Use a multimeter to check the presence of **+ 12 v** at the fuse holder with the ignition on.
Repair if necessary.

With the ignition on, use a multimeter to check for the presence of **+ 12 volts** on **track A3** of the UCH P1 connector.
If the voltage is present, replace the UCH.

If voltage is absent, ensure continuity and insulation against earth between **track A3 of the P1 UCH connector and the F27 (20A) fuse in the passenger compartment fuse box.**
Repair if necessary.

ET154 ACTIVE, ignition off

With the ignition off, use a multimeter to check the absence of **+ 12** at the passenger compartment fuse holder **F27**.
Repair if necessary.

If the voltage is absent, replace the UCH.

AFTER REPAIR	Carry out another fault finding check on the system. Deal with any other faults. Clear the stored faults.

ET103	KEY CODE RECEIVED

NOTES	Check that no fault is present or stored. The status will be displayed YES when the ignition is switched on (+ after ignition) with a valid key. If the status remains NO, try another key assigned to the vehicle before performing any operation.

ET103 NO: ignition on and key belonging to the vehicle

Check that status **ET154 12 V after ignition** is **ACTIVE** with the ignition on.
Remove any metal objects from the key-ring and try again.
Switch on the ignition with the key from another vehicle, changing the key inserts: If the **KEY CODE RECEIVED** status changes to **YES**, replace the vehicle key. If the status **KEY CODE RECEIVED** remains at **NO**, check the connections between the transponder ring and the UCH.
Replace the transponder ring.

AFTER REPAIR	Carry out another fault finding check on the system. Deal with any other faults. Clear the stored faults.

ET104	KEY CODE VALID

NOTES	The status will be displayed YES when the ignition is switched on (+ after ignition) with a key from the vehicle. If the status remains NO, try another key assigned to the vehicle before performing any operation.

ET104: NO despite the ignition being switched on, the key belonging to the vehicle and the key code received

Check that status **ET154 12 V after ignition** is **ACTIVE** with the ignition on.
Reallocate the keys with the After-Sales code. If the fault persists, replace the faulty vehicle key.

AFTER REPAIR	Carry out another fault finding check on the system. Deal with any other faults. Clear the stored faults.

ET167	ENGINE IMMOBILISER INDICATOR LIGHT

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.

Check the connection and condition of the instrument panel connector. Repair if necessary.
Check the connection and condition of the UCH **40-track EH1 connector**. Repair if necessary.
Check the **continuity and insulation** of the connection between: UCH 40-track EH1 connector **track A32** ⟶ **track 5** 30-track instrument panel connector Repair if necessary.

AFTER REPAIR	Carry out another fault finding check on the system. Deal with any other faults. Clear the stored faults.

NOTES	**These customer complaints should only be investigated after a complete check has been run using the diagnostic tool.**

NO DIALOGUE WITH THE COMPUTER ——————— **ALP 1**

ALP 1	No dialogue with the computer

NOTES	**None.**

Try the diagnostic tool on another vehicle.

Check:
– the connection between the diagnostic tool and the diagnostic socket (wiring in good condition),
– the engine and passenger compartment fuses.

Check for the presence of **+ 12 volts before ignition feed** on **track 16, + 12 volts after ignition feed** on **track 1** and an **earth** on **tracks 4 and 5** of the diagnostic socket.
Repair if necessary.

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

UCH P201 40-track connector **track 7** → fuse box
UCH P201 40-track connector **track 33** → **+ after ignition**
UCH P202 15-track connector **track B6** → **earth**
UCH P201 40-track connector **track 18** → **track 7** of the diagnostic socket (line K)

Repair if necessary.

AFTER REPAIR	Check the system operation.

This document presents the general diagnostic method applicable to all UCH computers on TWINGO vehicles with all engine types.

To carry out fault finding on this system, it is essential to have the following items:

- the Workshop Repair Manual for the vehicle concerned,
- the wiring diagram of the function for the vehicle concerned,
- the tools listed in the Special tooling required column.

GENERAL APPROACH TO FAULT FINDING:

- Use one of the diagnostic tools to identify the system fitted to the vehicle (to read the computer group, the program N°, the Vdiag, etc.).

- Locate the Fault finding documents corresponding to the system identified.

- Include information contained in the introductory sections.

- Read the faults stored in the computer memory and use the Interpretation of faults section of the documents.
  Reminder: Each fault is interpreted for a particular type of storage (fault present, fault stored in memory, fault present or stored). The checks defined for dealing with each fault are therefore only to be performed if the fault declared by the diagnostic tool is interpreted in the document for its type of storage. The storage type should be considered when using the diagnostic tool after the ignition has been switched off and switched back on.
  If a fault is interpreted when it is declared as stored, the conditions for applying fault finding appear in the NOTES box. If the conditions are not satisfied, use the fault finding strategy to check the circuit of the faulty part since the fault is no longer present on the vehicle. Perform the same operation when a fault is declared as stored by the diagnostic tool but is only interpreted in the documentation as a present fault.

- Perform the conformity check (appearance of possible incorrect operations not yet stated by the system's self diagnosis procedure) and apply the associated fault finding strategy according to results.

- Confirm the repair (customer complaint disappears).

- Use the fault finding procedure for each Customer complaint if the fault persists.

SPECIAL TOOLING REQUIRED:
- Diagnostic tool (except XR25).
- Multimeter.

Depending on the level of equipment, two UCH models can be installed in the car:

UCH	Basic **N2**	Top of the range **N3**
Diagnostic connection	**x**	**x**
Coded immobiliser (V3)	**x**	**x**
Indicators and the indicator light control	**x**	**x**
Horn (lighting warning, fog light lighting warning)	**x**	**x**
Rear fog light management	**x**	**x**
Front wipers: park position management	**x**	**x**
Front wipers with variable time delay	**x**	**x**
Interior lighting and luggage compartment lighting	**x**	**x**
Timed interior lighting		**x**
Electric central door locking by radio frequency		**x**
Electric central door locking indicator light management		**x**
Automatic locking when vehicle is in motion		**x**
Door unlocking in the event of an impact		**x**
Automatic door re-locking		**x**
Alarm connection		**x**

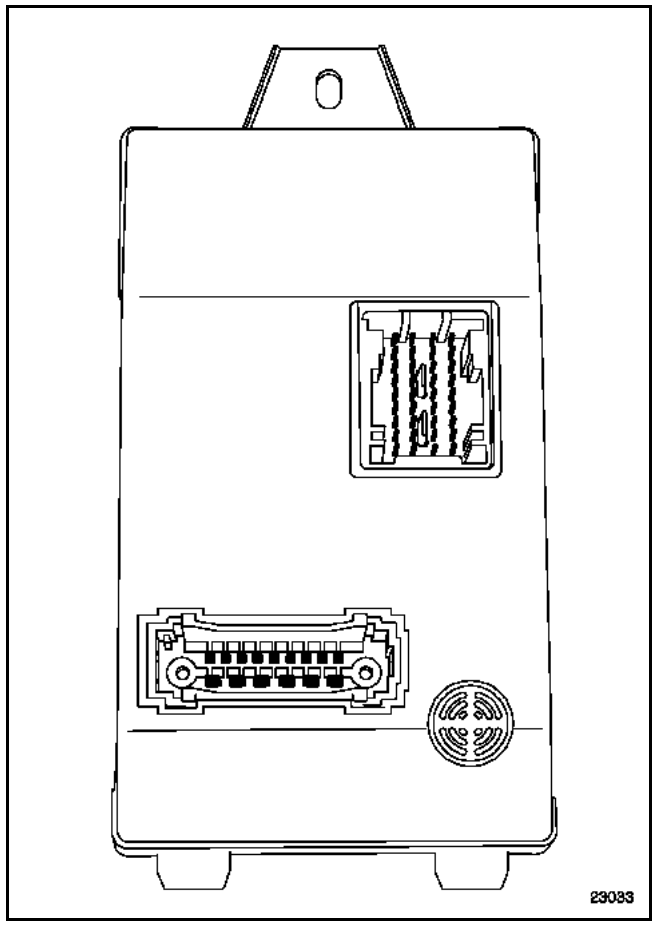
CONNECTION (complete)

Black 40-track connector:

Track	DESCRIPTION
1	Not used
2	Not used
3	Not used
4	Not used
5	Hazard warning lights indicator light
6	Vehicle speed input
7	Windscreen washer input
8	Electric door locking button input
9	Radio frequency aerial earth
10	Radio frequency aerial signal
11	Not used
12	Not used
13	Not used
14	Not used
15	Side lights input
16	Transponder ring input
17	Not used
18	Not used
19	Not used
20	Not used
21	Not used
22	+ After ignition
23	Impact connection input (air bag
24	Windscreen wiper sequencing input
25	Dipped headlights/main beam headlights signal input
26	Left-side indicator input
27	Rear fog light input
28	Right-side indicator input
29	Rear screen washer input
30	Luggage compartment door switch
31	Not used
32	Immobiliser indicator light output
33	Hazard warning lights input
34	Diagnostic connection
35	Not used
36	Engine immobiliser connection
37	Front fog lights input
38	Engine speed input
39	Heated rear screen input
40	Door switch input

Black 40-track connector:

Track	DESCRIPTION
A1	Earth
A2	Courtesy light output
A3	+ Before ignition
A4	Front windscreen wiper control
A5	Front windscreen supply (after contact)
A6	A6 Windscreen wiper park position
A7	Rear fog light output
A8	Right-hand indicator output
A9	Left-hand indicator output
B1	Door opening output
B2	Door closing output
B3	Central door locking-unlocking supply
B4	Driver's door opening output
B5	Interior light timing output
B6	Interior light supply

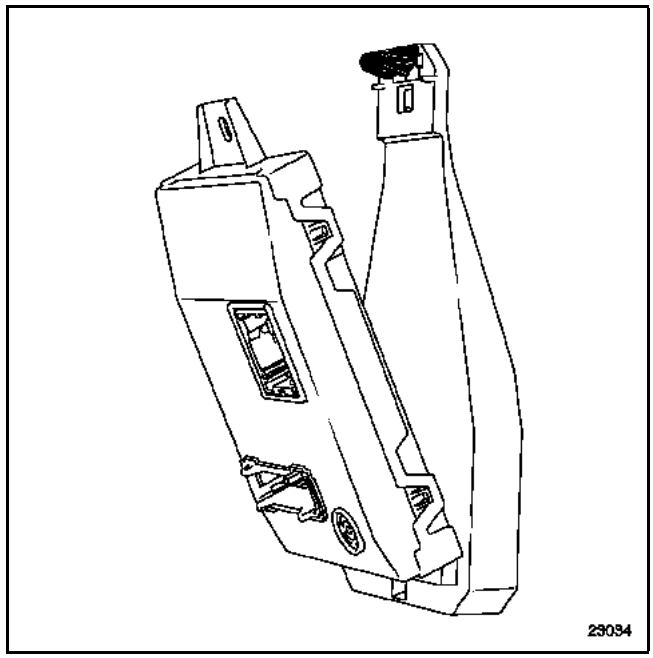


REMOVAL - REFITTING

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

The UCH is clipped onto its mounting.

IMPORTANT: Do not remove the UCH mounting as there is a risk of damaging it. If it is removed it must be replaced.



UCH CONFIGURATIONS

The configuration options for the UCH are:

Title and position on the diagnostic tool	Configuration	Type of UCH
Timed courtesy light (**LC021**)	**automatic**	N3 only
Automatic re-locking (**LC069**)	**automatic**	N3 only
RAID function authorisation by fault finding procedure (**LC081**)	**automatic**	N3 only
Hazard warning light comes on in the event of an impact **LC090**	**automatic**	N3 only

CONFIGURATION OF THE CONNECTION UNIT

Using the diagnostic tools

- With the ignition on, enter into dialogue with the vehicle.
- Select and confirm the **Connection unit**.
- In the **Command mode** menu, select and confirm the **Configuration** line.
- Select the command: **CF716: Type N2,**
  CF717: Type N3,
- The message: **Do you wish to proceed?** appears.

- Select **yes** then carry out the automatic configuration,
  - For the **basic** UCH or **N2**
    Configuration of the **timed interior light → None**
    Configuration of the **hazard warning lighting in the event of an impact → None**
    Configuration of the **CAR function by fault finding procedure → None**
    Configuration of the **automatic re-locking → None**

  - For the **top of the range** UCH or **N3**
    Configuration of the **timed interior light → Yes**
    Configuration of the **hazard warning lighting in the event of an impact → With**
    Configuration of the **RAID function by fault finding procedure → With**
    Configuration of the **automatic re-locking → With**

- Check the settings in the **Read configuration** menu.

DF072 PRESENT OR STORED	IMPACT CONNECTION

NOTES	**Special notes:** – The fault is present for **8 seconds** after switching on the ignition and disappears when the ignition is switched off. **NOTE:** if this fault is present, the door locking while driving function is prevented from working.

Carry out the fault finding procedure on the air bag computer.
Repair if necessary.

Check the connection and condition of the UCH connectors and replace the connector if necessary.

Check **the insulation, the continuity and the absence of** interference resistance on the **30-track air bag computer** connection:

UCH 40-track EH1 connector **track 23B** ⟶ **track 27** airbag computer

Repair if necessary.

For the 50-track air bag computer:

UCH 40-track EH1 connector **track 23B** ⟶ **track 37** airbag computer

Repair if necessary.

AFTER REPAIR	Follow the instructions. Deal with any other faults. Clear the fault memory.

DF119 **STORED**	WINDSCREEN WIPER PARK POSITION

NOTES	**Conditions for applying the fault finding procedure to stored faults:** – the fault is declared as present following operation of the windscreen wiper. **NOTE:** random operation of the windscreen wipers in timed operation position (time delay not adhered to).

Check that the windscreen wiper park position status **ET005 is active** every time the wiper blade arrives at the rest position, then becomes inactive again.

Check the connection and condition of the UCH connectors.
Replace the connector if necessary.

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

UCH P1 connector **track A6** → **track 1** windscreen wiper motor

earth → **track 5** windscreen wiper motor

Repair if necessary.

Check the connection and condition of the windscreen wiper motor connector.
Check the motor.
Check the wiper fitting.
Replace the windscreen wiper motor if necessary.

AFTER REPAIR	Follow the instructions. Deal with any other faults. Clear the fault memory.

DF121 PRESENT	UCH INTERNAL ELECTRONIC FAULT

NOTES	The fault is declared present when the ignition is switched off. **Special note:** in the case of a stored fault, check that there are no other faults present and clear the faults.

Replace the UCH.

AFTER REPAIR	Deal with any other faults. Clear the fault memory.

DF131 **PRESENT**	ELECTRIC DOOR LOCK BUTTON CIRCUIT CC.0 : Short circuit to earth

NOTES	Fault declared as present when the door locking button is pressed.

Check the connection and condition of the UCH **40-track EH1 connector if necessary.**
Replace the connector if necessary.

Check the **insulation and continuity** of the connections:

UCH 40-track EH1 connector **track 8A** → **track 1** electric door locking button

earth → **track 4** electric door locking button

Repair if necessary.

AFTER REPAIR	Follow the instructions. Deal with any other faults. Clear the fault memory.

DF175 **STORED**	IMPACT DETECTION SIGNAL

NOTES	No fault present. Application of the fault finding procedure to the stored fault.

Carry out fault finding on the airbag computer.
Repair if necessary.

AFTER REPAIR	Deal with any other faults. Clear the fault memory.

NOTES	Only check the conformity after a complete check with the fault finding tool. The values indicated in this conformity check are given as examples. Test conditions: **engine stopped, ignition on**.

Order	Function	Parameter or status Check or action	Display and notes	Fault finding
1	Power supply	**PR002:** Battery voltage	**12 < X < 12.5 volts**	**If there is a problem:** carry out a fault finding test on the charge circuit.
		ET002: + 12 volts after ignition	**Present**	**If there is a problem:** refer to the fault finding procedure for status **ET002.**
		ET242: Engine running	**NO**	**None.**
2	Lights	**ET029:** Right-hand indicator control	**Active** during right-hand indicator control	**If inactive** refer to the fault finding procedure for status **ET029**.
		ET028: Left-hand indicator control	**Active** during left-hand indicator control	**If inactive:** refer to the fault finding procedure for status **ET028.**
		ET022: Hazard warning lights control	**Active** during hazard warning lights control	**If inactive** refer to the fault finding procedure for status **ET022**.

NOTES	Only check the conformity after a complete check with the fault finding tool. The values indicated in this conformity check are given as examples. Test conditions: **engine stopped, ignition on**.

Order	Function	Parameter or status Check or action	Display and notes	Fault finding
3	Windscreen wiper	**ET032:** Windscreen washer control	**Active** during windscreen washer control	**If Inactive** refer to the fault finding procedure for status **ET032**.
		ET035: Windscreen wiper timing	**Active** when windscreen wiper control is in intermittent position	**If inactive** refer to the fault finding procedure for status **ET035**.
		ET005: Windscreen wiper park position	**Active** with windscreen wiper control in intermittent position during each pause of the windscreen wipers	**If there is a problem:** apply the **fault finding procedure** on windscreen wiper park position fault **DF119**
		ET031: Rear screen wash control	**Active** during rear screen wiper control	**In the event of a problem:** consult the fault finding procedure for status **ET031**.
4	Opening elements	**ET192:** Front door	**Open** when front doors are open	**In the event of a problem:** refer to the fault finding procedure for status **ET192**.
		ET111: Rear door	**Open** when rear doors are open	**If there is a problem:** refer to the fault finding procedure for status **ET111**.
		ET217: Door locking indicator light	**Illuminated** when opening elements are locked **Off** when opening elements are unlocked	**If there is a problem:** refer to the fault finding procedure for status **ET217**.

NOTES	Only check the conformity after a complete check with the fault finding tool. The values indicated in this conformity check are given as examples. Test conditions: **engine stopped, ignition on**.

Order	Function	Parameter or status Check or action	Display and notes	Fault finding
4	Opening elements (continued)	**ET010:** valid radio frequency key	**YES** status during locking or unlocking of the vehicle by remote control.	**If there is a problem:** refer to the fault finding procedure for status **ET010**.
		ET193: Radio frequency frame received	**YES** status during locking or unlocking of the vehicle by remote control.	**if there is a problem:** refer to the fault finding procedure for status **ET193**.
		ET012: Source last opening elements activation	**TRF** during locking with the remote control, **Central door locking switch** during locking with the central door locking switch.	None.
		ET105: last opening elements activation	**UNLOCKING** **LOCKING**	None.
5	Speed	**PR001:** Vehicle speed	**X in mph**	**If there is a problem:** apply **the fault finding procedure** on incorrect vehicle speed fault **DF129**.

On **the passenger compartment central units N3** some of the statuses and parameters can only be seen on the **function test** screen. There are two function tests.

Radio frequency function test

ET010: valid radio frequency key
ET012: source last opening elements activation
ET105: last opening elements activation
ET193: radio frequency frame received

RAID function test

ET018: RAID function authorisation by fault finding
ET019: RAID function authorisation by central door locking switch
PR001: vehicle speed

ET002	+ 12 VOLTS AFTER IGNITION

ET002 INACTIVE, ignition on

Check the passenger compartment fuse.
Use a multimeter to check the presence of **+ 12 v** at the fuse holder with the ignition on.
Repair if necessary.
With the ignition on, use a multimeter to check for the presence of **+ 12 volts** on **track A3** of the UCH P1 connector.

If there is no voltage, ensure **the continuity and insulation** to earth between **track B22 of the UCH 40-track EH1 connector and the 10 Amp fuse of the passenger compartment fuse box**.
Repair if necessary.

ET002 ACTIVE ignition off

With the ignition off, use a multimeter to verify the absence of **+ 12 V** at the passenger compartment fuse holder.
Repair if necessary.

AFTER REPAIR	Carry out another fault finding check on the system. Deal with any other faults. Clear the stored faults.

ET010	VALID RADIO FREQUENCY KEY

NOTES	**Only for N3 UCH.** Check that no fault is present. The status is declared **YES** when the remote control is pressed. If the status is declared **NO, switch the + after ignition feed off and on**, and retry with another vehicle key.

If ET010 stays at NO: when the remote control is pressed

Resynchronize the keys switching the ignition on (+ after ignition feed).

If the problem persists and if **ET193 RADIO FREQUENCY FRAME RECEIVED** status is shown as **YES**, replace the keys.
If the problem persists, replace the UCH.

AFTER REPAIR	Carry out another fault finding check on the system. Deal with any other faults. Clear the stored faults.

ET022	HAZARD WARNING LIGHTS CONTROL

NOTES	There must be no present or stored faults. Activate the hazard warning light control. The status must be **ACTIVE**.

ET022 INACTIVE	
	Check the indicator / UCH **25A** supply fuse. Replace it if necessary.
	Check the connection and condition of the connector of the hazard warning light switch. Repair the connector if necessary.
	Ensure the **continuity** of the connection between hazard warning light switch **tracks 3 and 6** ⟶ **earth** Repair if necessary.
	Check the **insulation, continuity and the absence of interference resistance** on the connection: hazard warning light switch **track 4** ⟶ **track B33** 40-track EH1 connector Repair if necessary.
	Check the operation of the hazard warning lights control.

AFTER REPAIR	Carry out another fault finding check on the system. Deal with any other faults. Clear the stored faults.

ET027	REAR FOG LIGHT CONTROL

NOTES	**Only consult this customer complaint after a complete check using the diagnostic tool.** **Check the bulbs.** **Check that status ET258 Dipped beam headlights is ACTIVE if not, refer to status sheet ET258.**

Check the UCH fuse.
Repair if necessary.

Ensure the **continuity and insulation** of the connection between:
UCH **track 7** ⟶ rear fog light
Repair if necessary.

AFTER REPAIR	Carry out another fault finding check on the system. Deal with any other faults. Clear the stored faults.

ET028 **ET029**	LEFT-HAND INDICATOR CONTROL RIGHT-HAND INDICATOR CONTROL

NOTES	There must be no present or stored faults. Switch on the ignition. Operate the left or right direction indicator. The status must be **ACTIVE**.

ET028 **or** **ET029** **INACTIVE**	Check the indicator / UCH **25A** supply fuse. Replace it if necessary.
	Check the connection and condition of the indicator stalk connector. Repair the connector if necessary.
	Ensure the **continuity** of the connection between indicator stalk **track 5** ⟶ **earth** Repair if necessary:
	Disconnect the **UCH 40-track EH1 connector and right or left indicator while in operation.** Ensure the **continuity and insulation** of the connections between: right-hand indicator stalk **track 4** ⟶ **track B28** UCH 40-track EH1 connector left-hand indicator stalk **track 6** ⟶ **track B26** UCH 40-track EH1 connector Repair if necessary.

AFTER REPAIR	Carry out another fault finding check on the system. Deal with any other faults. Clear the stored faults.

ET031	REAR SCREEN WASHER CONTROL

NOTES	There must be no present or stored faults. Switch on the ignition. Put the windscreen wiper stalk in the rear screen wash position. The status must be **ACTIVE.** **Attention: when the rear screen washer signal is lost, the front windscreen wiper starts automatically.**

ET031 **INACTIVE**	Check the rear screen wiper **15A**fuse. Replace it if necessary.
	Check the connection and condition of the windscreen wiper stalk connector. Repair the connector if necessary.
	Ensure the **continuity and insulation** of the connections between: UCH 40-track EH1 connector **track B29** → windscreen wiper stalk **track B2** **earth** → windscreen wiper stalk **track B3** **+ after ignition** → windscreen wiper stalk **track B5** Repair if necessary.
	Check the correct operation of the washer pump, in particular the **continuity and insulation** of the connections: pump **track 2** → **track B4** windscreen wiper stalk pump **track 1** → **track B2** windscreen wiper stalk Repair if necessary.

AFTER REPAIR	Carry out another fault finding check on the system. Deal with any other faults. Clear the stored faults.

ET032	WINDSCREEN WASHER SWITCH

NOTES	There must be no present or stored faults. Switch on the ignition. Put the windscreen wiper stalk in the front screen wash position. The status must be **ACTIVE**.

ET032 **INACTIVE**	Check the rear screen wiper **15A**fuse. Replace it if necessary.
	Check the connection and condition of the windscreen wiper stalk connector. Repair the connector if necessary.
	Ensure the **continuity and insulation** of the connections between: UCH 40-track EH1 connector **track A7** → windscreen wiper stalk **track B4** **earth** → windscreen wiper stalk **track B3** **+ after ignition** → windscreen wiper stalk **track B5** Repair if necessary.
	Check the correct operation of the washer pump, in particular the **continuity and insulation** of the connections: pump **track 2** → **track B4** windscreen wiper stalk pump **track 1** → **track B2** windscreen wiper stalk Repair if necessary.

AFTER REPAIR	Carry out another fault finding check on the system. Deal with any other faults. Clear the stored faults.

ET035	WINDSCREEN WIPER TIMER

NOTES	There must be no present or stored faults. Switch on the ignition. Put the wiper stalk in the intermittent wipe position. The status must be **ACTIVE**.

ET035 **INACTIVE**	Check the rear screen wiper **15A**fuse. Replace it if necessary.
	Check the connection and condition of the wiper stalk connector. Repair the connector if necessary.
	Ensure the **continuity and insulation** of the connections between: UCH EH1 connector **track B24** → windscreen wiper stalk **track A6** **earth** → windscreen wiper stalk **track B3** **+ after ignition** → windscreen wiper stalk **track A1** Repair if necessary.

AFTER REPAIR	Carry out another fault finding check on the system. Deal with any other faults. Clear the stored faults.

ET123	TAILGATE OPEN

NOTES	**Only for N3 UCH**. Check that no fault is present. Open the front doors one after another.

Check that when the tailgate is open the corresponding status is YES or that, with the tailgate closed, the corresponding status is NO.
Check **the connections** between the door wiring and the passenger compartment wiring and the **continuity and insulation** between: flange contact **A** and **track 30B** of the UCH EH1 connector flange contact **B** and earth **Repair if necessary** (see the wiring diagrams for the vehicle concerned).
Open the tailgate, disconnect the lock and close it. Verify the continuity between the earth input track and the track on the UCH. Pull the handle to open the lock and check that there is no longer continuity between the earth input track and the UCH track. In the event of a fault, replace the lock.
Check that the lock engages into the striker plate properly.

AFTER REPAIR	Carry out another fault finding check on the system. Deal with any other faults. Clear the stored faults.

ET192	FRONT DOORS

NOTES	Check that no fault is present. Open the front doors one after another.

Check that for each open door the corresponding status is active and for each closed door the corresponding status is inactive.
Check the **connections** between the door wiring and the passenger compartment wiring and the **continuity and insulation**between: flange contact **A** and **track 40B** of the UCH EH1 connector flange contact **B** and earth **Repair if necessary** (see wiring diagram for the vehicle concerned).
Open the door, disconnect the lock and close the lock. Verify the continuity between the earth input track and the track on the UCH. Pull the handle to open the lock and check that there is no longer continuity between the earth input track and the UCH track. In the event of a fault, replace the lock.
Check that the lock engages into the striker plate properly.

AFTER REPAIR	Carry out another fault finding check on the system. Deal with any other faults. Clear the stored faults.

ET193	RADIO FREQUENCY FRAME RECEIVED

NOTES	**Only for N3 UCH.** Check that no fault is present. The status is declared **YES** when the remote control is pressed. If the status is declared **NO, switch the + after ignition feed off and on**, and retry with another vehicle key.

ET193 remains NO: when the remote control is pressed

Press the remote control button of another vehicle in the same family (CLIO II / or TRAFIC /) or blank key:
Check that the status changes to **YES** when it is pressed.
If **status YES** is displayed, replace the faulty vehicle remote control unit.
If **status NO** is displayed, replace the **UCH**.

AFTER REPAIR	Carry out another fault finding check on the system. Deal with any other faults. Clear the stored faults.

ET257	SIDE LIGHTS SIGNAL

NOTES	There must be no present or stored faults. Activate the side lights switch. The status should be **ACTIVE** and the side lights on. **Check the bulbs.**

ET257 INACTIVE	Check the **10A** side light fuse. Replace it if necessary.
	Check the connection and condition of the UCH **40-track EH1 connector if necessary.** Replace the connector if necessary.
	Ensure the **continuity and insulation** of the connection between: UCH 40-track EH1 connector **track A15** ⟶ fuse box, side light fuse **(10 A)** Repair if necessary.

AFTER REPAIR	Carry out another fault finding check on the system. Deal with any other faults. Clear the stored faults.

ET258	DIPPED HEADLIGHTS SIGNAL

NOTES	There must be no present or stored faults. Activate the dipped headlights control. The status should be **ACTIVE** and the dipped headlights on. **Check the bulbs.**

ET258 INACTIVE	Check the **15A** dipped headlights fuse. Replace the fuses if necessary.
	Check the connection and condition of the **UCH** EH1 40-track connector. Replace the connector if necessary.
	Ensure the **continuity and insulation** of the connection between: dipped headlights control **track 2** ⟶ **track B25** UCH 40-track EH1 connector Repair if necessary.

AFTER REPAIR	Carry out another fault finding check on the system. Deal with any other faults. Clear the stored faults.

NOTES	**These customer complaints should only be investigated after a complete check has been run using the diagnostic tool.**

NO DIALOGUE WITH THE COMPUTER **ALP 1**

LIGHTING

INDICATOR LIGHTS DO NOT OPERATE **ALP 2**

SIDE LIGHTS DO NOT OPERATE **ALP 3**

DIPPED BEAM HEADLIGHTS DO NOT OPERATE **ALP 4**

MAIN BEAM HEADLIGHTS DO NOT OPERATE **ALP 5**

FRONT FOG LIGHTS DO NOT OPERATE **ALP 6**

REAR FOG LIGHTS DO NOT WORK **ALP 7**

WIPERS, WINDSCREEN WASHERS, DE-ICING

WINDSCREEN WIPER LOW SPEED DOES NOT OPERATE **ALP 8**

WINDSCREEN WIPER HIGH SPEED DOES NOT OPERATE **ALP 9**

REAR SCREEN WIPERS DO NOT OPERATE **ALP 10**

HEATED REAR WINDSCREEN DOES NOT WORK **ALP 11**

ALP 1	No dialogue with the computer

NOTES	**None.**

Try the diagnostic tool on another vehicle.

Check:
– the connection between the diagnostic tool and the diagnostic socket (wiring in good condition),
– the engine and passenger compartment fuses.

Check for the presence of **+ 12 volts before ignition feed** on **track 16, + 12 volts after ignition feed** on **track 1** and an **earth** on **tracks 4 and 5** of the diagnostic socket.
Repair if necessary.

Check the computer connections.

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

UCH P1 connector track A1 → **earth**
UCH P1 connector track A3 → **fuse box 12 volts before ignition**
UCH EH1 connector track B34 → **track 7 of the diagnostic socket (line K)**

Repair if necessary.

AFTER REPAIR	Check the system operation.

ALP 2	Indicator lights do not operate

NOTES	**Only consult this customer complaint after a complete check using the diagnostic tool.** **Check the bulbs.**

Check the condition of the **25 A** fuse and replace it if necessary.
Activate the hazard warning light control and check that status **ET022 Hazard warning lights control** is active; if not refer to the section on how to deal with this status. Activate the right or left-hand indicator and check that the left and right indicator control status **ET028** and **ET029 are active** if not, refer to the relevant section for these statuses.
Check the condition of the **P1 15-track connector** of the UCH. Replace it if necessary.
Ensure the **continuity** of the following connections: UCH P1 connector **track A9** ⟶ **left-hand indicator** UCH P1 connector **track A8** ⟶ **right-hand indicator** Repair if necessary.

AFTER REPAIR	Check the system operation.

ALP 3	Side lights not working

NOTES	**Only consult this customer complaint after a complete check using the diagnostic tool.** **Check the bulbs.**

Activate the side lights control and check that the status **ET020 Side lights control** is active; if not refer to the section on how to deal with this status.
Check the side light **10A** supply fuses. Replace it if necessary.
Check the **continuity** of the connection between: side light fuse **(10 A)** ⟶ **front and rear side lights** Repair if necessary.

AFTER REPAIR	Check the system operation.

ALP 4	Dipped headlights not working

NOTES	**Only consult this customer complaint after a complete check using the diagnostic tool.** **Check the bulbs.**

Check the dipped headlights **15A** supply fuses. Replace it if necessary.
Check the **continuity** of the connection between: light stalk **track B2** ⟶ fuse box, dipped headlights fuses **(15 A)** Repair if necessary.
Check the **continuity** of the connection between: fuse box, dipped headlights fuse **(15 A)** ⟶ **dipped headlights**

AFTER REPAIR	Check the system operation.

ALP 5	Main beam headlights not working

NOTES	**Only consult this customer complaint after a complete check using the diagnostic tool.** **Check the bulbs.**

Check the main beam headlights **15A** supply fuses. Replace it if necessary.
Check the **continuity** of the connection between: light stalk **track B1** ⟶ fuse box, main beam headlights fuses **(15 A)** Repair if necessary.
Check the **continuity** of the connection between: fuse box, main beam headlights fuses **(15 A)** ⟶ **main beam headlights**

AFTER REPAIR	Check the system operation.

ALP 6	Front fog lights do not operate

NOTES	**Only consult this customer complaint after a complete check using the diagnostic tool.** **Check the bulbs.**

Activate the fog light control. Check the front fog lights fuse. Replace the fuse if necessary.
Check for the presence of **+12 volts** before ignition on **track 3** of the front fog light relay. Repair if necessary.
Activate the front fog light control. Check for the presence of **+ 12 volts** + before ignition on **track 1** of the front fog light relay. Repair if necessary. Check for the presence of earth on **track 2** of the front fog light relay. Repair if necessary.
Ensure the **continuity and insulation** of the connection between: front fog light relay **track 5** ⟶ front fog lights Repair if necessary.

AFTER REPAIR	Check the system operation.

ALP 8	Windscreen wiper low speed not working

NOTES	There must be no present or stored faults.

Check the front wiper **15A** fuse. Replace the fuse if necessary.
Check the + after ignition feed of the stalk, track **B5**. Repair if necessary.
Ensure the **continuity and insulation** of the connections between: stalk **track A3** ⟶ **track 3** windscreen wiper motor **earth** ⟶ **track 5** windscreen wiper motor Repair if necessary. Check that the motor operates correctly.
Check that the wiper mechanism or motor are not jammed. Repair if necessary.

AFTER REPAIR	Carry out another fault finding check on the system. Deal with any other faults. Clear the stored faults.

ALP 9	High speed windscreen wiper not working

NOTES	There must be no present or stored faults.

Check the front wiper **15A** fuse. Replace the fuse if necessary.
Check the + after ignition feed of the stalk, track **A1**. Repair if necessary.
Ensure the **continuity and insulation** of the connections between: stalk **track A2** → **track 4** windscreen wiper motor **earth** → **track 5** windscreen wiper motor Repair if necessary. Check that the motor operates correctly.
Check that the wiper mechanism or motor are not jammed. Repair if necessary.

AFTER REPAIR	Carry out another fault finding check on the system. Deal with any other faults. Clear the stored faults.

ALP 10	Rear screen wiper does not operate

NOTES	**Confirm the fault.** **Only consult this customer complaint after a complete check using the diagnostic tool.**

Check the rear screen wiper **15A** fuse.
Replace the fuse if necessary.

Check the + after ignition feed of the stalk, track **B5.**
Repair if necessary.

Ensure the **continuity and insulation** of the connections between:

rear screen wiper fuse **(15 A)** → **track 3** rear screen wiper motor
wiper switch **track B1** → **track 1** rear screen wiper motor
earth → **track 2** rear screen wiper motor

Repair if necessary.
Check that the motor operates correctly.

Check that the wiper mechanism or motor are not jammed.
Repair if necessary.

AFTER REPAIR	Check the system operation.

ALP 11	Heated rear screen not working

NOTES	**Only consult this customer complaint after a complete check using the diagnostic tool.**

Check the heated rear screen **20A** fuse.
Replace the fuse if necessary.
Ensure the **continuity and insulation** of the connection between:
fuse box, rear screen fuse **(20 A)** ⟶ heated rear screen switch
Repair if necessary.

Ensure the **continuity and insulation** of the connections between:
heated rear screen switch ⟶ heated rear screen
earth ⟶ heated rear screen
Repair if necessary.

AFTER REPAIR	Check the system operation.