TWINGO

1 Engine and peripherals

86D MULTIMEDIA CONNECTION UNIT

BICVdiag No.: 14

V1 **Edition Anglaise**

MULTIMEDIA CONNECTION UNIT

Fault finding – Introduction

1. SCOPE OF THIS DOCUMENT

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

Vehicle(s): **CLIO III and NEW TWINGO** *Function concerned*: **MULTIMEDIA CONNECTION UNIT**	*Computer name:* **MULTIMEDIA CONNECTION UNIT** *Vdiag No.:* **14**

2. PREREQUISITES FOR FAULT FINDING

Documentation type

Fault finding procedures (this manual):
– 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. 1681 Universal bornier

3. REMINDERS

Fault finding procedure

To run fault finding on the vehicle computers, switch on the ignition.

Depending on the type of vehicle equipment, proceed as follows:

For vehicles with key/radio frequency remote control, use the key to switch on the ignition.
For vehicles with Renault cards, – with the vehicle card in the card reader, – press and hold the start button (longer than **5 seconds**) with start-up conditions not fulfilled, connect the **diagnostic tool** and perform the required operations.

To cut off + after ignition feed, proceed as follows:

For vehicles with key/radiofrequency remote control,use the key to switch off the ignition.
For vehicles with Renault cards, Press the Start button twice briefly (less than **3 seconds**), Ensure that the + after ignition feed has been cut off by checking that the computer warning lights on the instrument panel have gone out.

Faults

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

The **present** or **stored** status of faults should be taken into consideration when the **diagnostic tool** is used after the **+ after ignition feed** has been switched on (without any of the system components being activated).

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 component detected as faulty,
- the condition of the wires (melted or split insulation, wear).

Conformity check

The aim of the conformity check is to check the data that does not display a fault on the **diagnostic tool** when the data is 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 repairs.

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

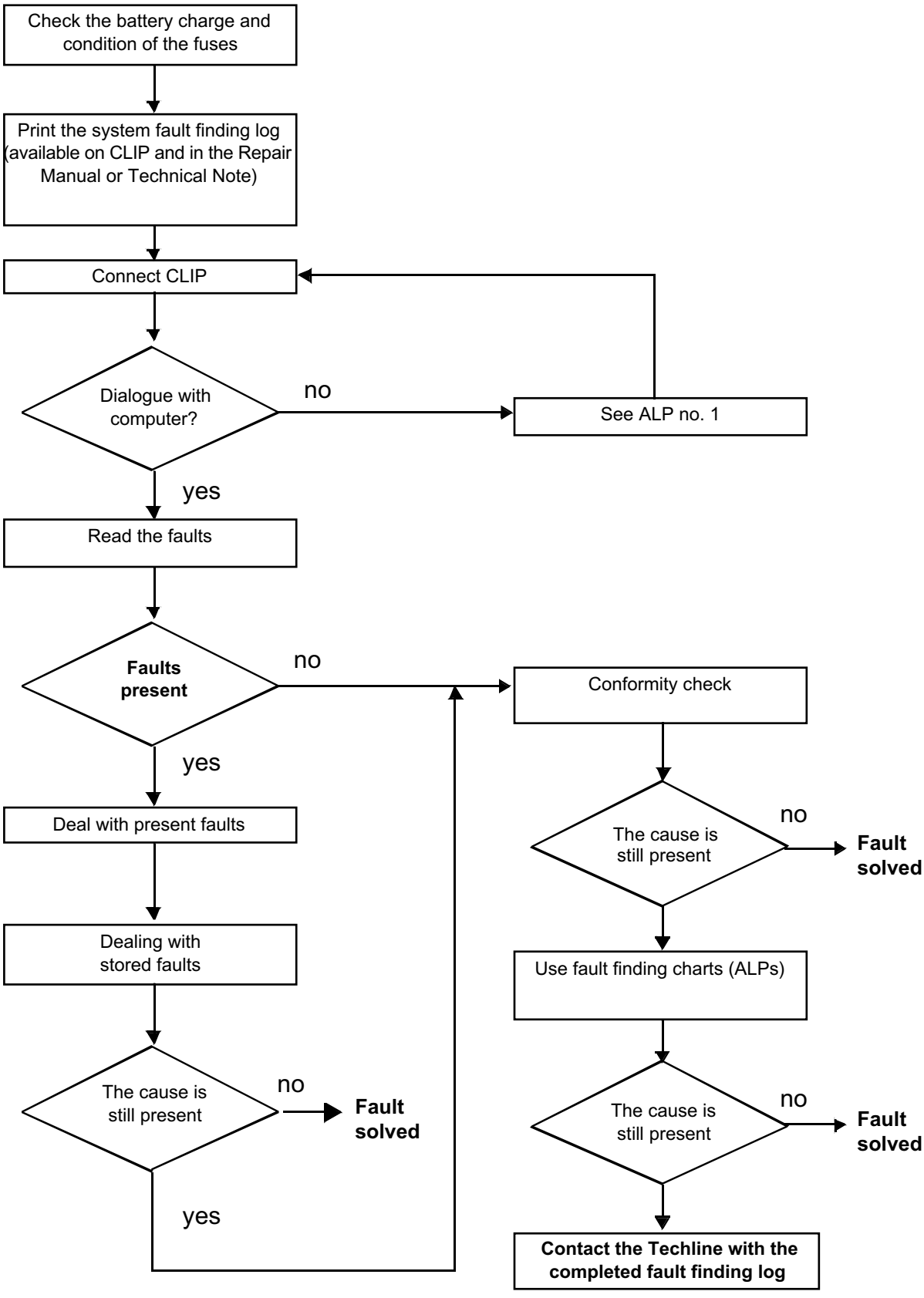
If a status is not behaving normally or a parameter is outside the permitted tolerance values, consult the corresponding fault finding page.

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 processed by **Customer Complaints**.

A synopsis of the general 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)

4.1. Wiring check

Fault finding problems
Disconnecting the connectors and/or manipulating the wiring may temporarily remove 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 made (stored fault).

Visual inspection
Look for damage under the bonnet and in the passenger compartment.
Carefully check the fuses, insulators and wiring harness routing.
Look for signs of oxidation.

Physical inspection
While manipulating the wiring harness, use the **diagnostic tool** to note any change in fault status from stored to present.
Make sure that the connectors are properly locked.
Apply light pressure to the connectors.
Twist the wiring harness.
If there is a change in status, try to locate the source of the fault.

Checking earth insulation
This check is carried out by measuring the voltage (multimeter in voltmeter mode) between the suspect connection and the **12 V** or **5 V**. The correct measured value should be 0 V.

Checking insulation against + 12 V or + 5 V
This check is carried out by measuring the voltage (multimeter in voltmeter mode) between the suspect connection and the earth. In the first instance, the earth may be taken on the chassis. The correct measured value should be **0 V**

Continuity check
A continuity check is carried out by measuring the resistance (multimeter in ohmmeter mode), with the connectors disconnected at both ends. The expected result must be between: **0 Ω < X < 2** Ω for every connection. The line must be fully checked, and the intermediate connections are only included in the method if this saves time during the fault finding procedure. The continuity check on the multiplex lines must be carried out on both wires. The measured value must be between: **0 Ω < X < 2 Ω**.

Checking the supply
This check may be carried out using a test light (**21 W** or **5 W** depending on the maximum authorised load)

4.2. Connector 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.

1. 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.

2. 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.

3. Visual inspection of the plastic casing:

– Check that there is no mechanical damage (casing crushed, split, broken, etc.), in particular to the fragile components (lever, lock, sockets, etc.).
– Check that there is no heat damage (casing melted, darker, deformed, etc.).
– Check that there are no stains (grease, mud, liquid, etc.).

4. 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 contact comes out 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 seals (1 for each wire), check that the unit seals 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 sockets 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 the 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, consult **Technical Note 6015A, Repairing electrical wiring**.

5. FAULT FINDING LOG

IMPORTANT!

IMPORTANT
Any fault on a complex system requires thorough fault finding 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 COMPULSORY TO COMPLETE 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 Techline,
– for approval requests when replacing parts for which approval is mandatory,
– 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.

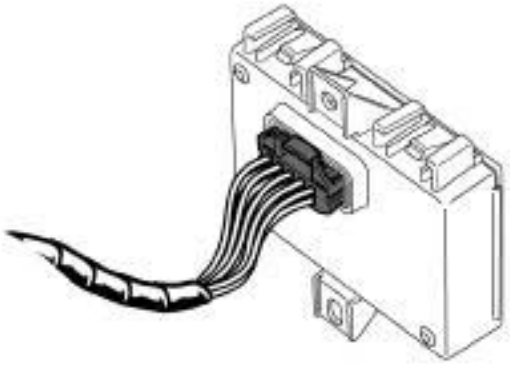
6. SAFETY INSTRUCTIONS

Safety rules must be observed during any work on a component to prevent any material damage or personal injury:
– check the battery voltage to avoid incorrect operation of computer functions,
– use the proper tools.

Clio III

Multimedia connection unit

Connections of the multimedia connection unit



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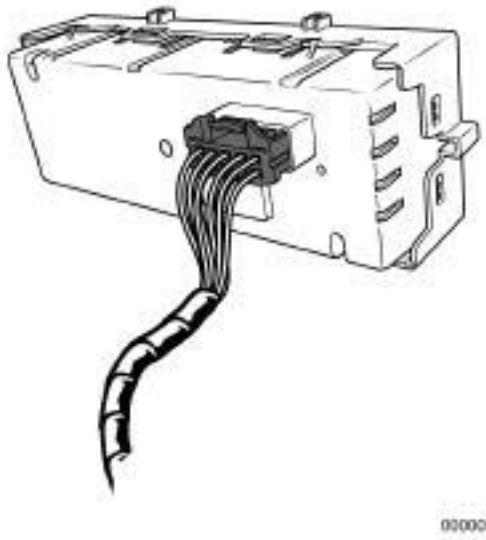
Display in the passenger compartment

A2 display

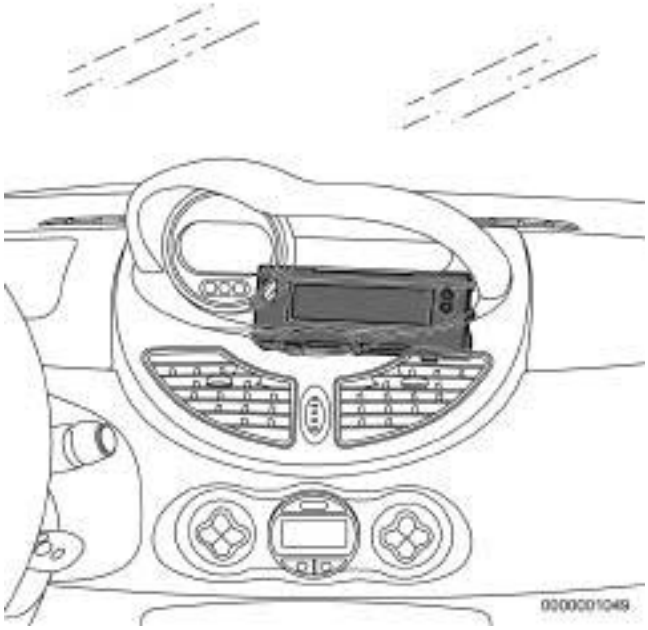
A3 display

Rear view of the display

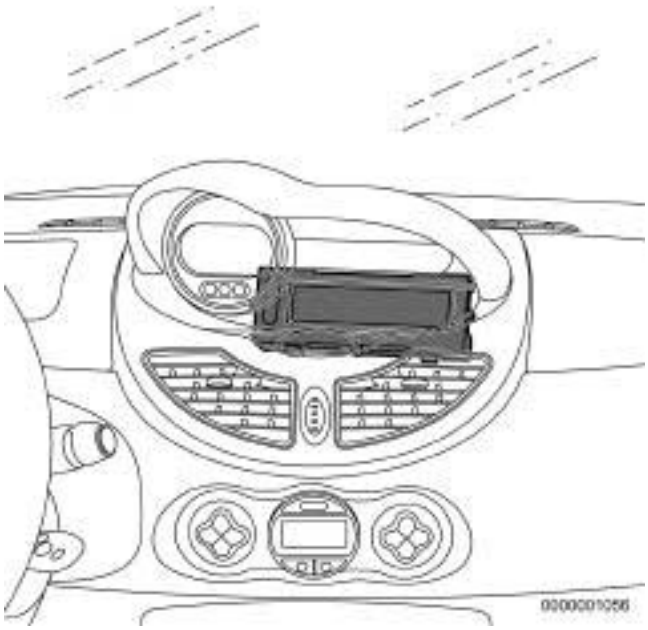


For New Twingo

A2 display



A3 display



Role of main components

– Multimedia network interface unit: enables information to be exchanged between the “vehicle” and “multimedia” multiplex networks.

The multimedia network interface unit is integrated into the display computer on vehicles not equipped with a navigation system.
If the vehicle is equipped with a navigation system, the multimedia network interface unit is a computer which is independent of the display: the multimedia connection unit, located behind the glovebox on the passenger side.

The multimedia connection unit (Display or Multimedia connection unit) receives various signals from the vehicle CAN (speed, status of exterior lights) and retransmits them for the radio via the Multimedia CAN.

The multimedia connection unit (Display or Multimedia connection unit) transmits the activation signal to the radio and to the other computers participating in the multimedia function when the user switches on the radio or starts the vehicle.

The multimedia connection unit is involved in the radio anti-theft protection system.
The protection is based on an identifier, the "Vehicle ID", sent on the CAN-V by the instrument panel computer. The multimedia connection unit reads the "Vehicle ID" on the CAN-V and sends it to the CAN-M for the multimedia type computers.

The multimedia connection unit allows the optimum configuration of the sound volume according to the vehicle speed.

– Display: displays various multimedia system data such as the station selected, time, CD listing and satellite guidance information.

– Radio control satellite: allows the different functions of the multimedia system to be accessed through the radio control satellite.

– Radio/navigation computer: manages the various multimedia system functions according to user requests and transmits audio data to the vehicle via the speakers.

General operation

The multimedia system is involved in the following functions:
– Radio reception (AM, FM).
– Playing CDs/MP3 CDs/navigation map.
– Guidance and navigation system with colour screen.
– Bluetooth hands-free phone.

The use of this multimedia system allows the customer:
– To select radio stations by using the preselections, the list or manual selection.
– To have an automatically-updated radio list.
– To listen to CDs or MP3 CDs.
– To control the radio using the radio control satellite.
– To change various acoustic parameters (bass, treble, fader, etc.).
– To navigate on a colour screen (visual and audio guidance): for this function the system uses GPS, the vehicle speed wire information and an internal gyroscope.
– To receive traffic information via RDS-TMC and to display it on the navigation map.
– To display the time and temperature on the screen.
– To use the hands-free phone function (sound relayed to the radio speakers) with a Bluetooth phone.
– To be protected by an immobiliser code.

CF007: Vehicle configuration (Carry out this configuration only if the vehicle is not equipped with a Navigation system).
This command is used to configure the computer according to the vehicle equipment.
After having performed **CF007**, perform **CF012 Lighting**.

CF008: Radio
This command is used to configure the computer according to the vehicle equipment.
Reread the configuration **LC004 Radio** in the **Read configuration** menu to confirm that the change was correctly accepted.

CF009: Navigation (Only for **Clio III**).
This command is used to configure the computer according to the Navigation equipment of the vehicle.
Only use this command on a vehicle equipped with navigation.

CF012: Lighting (Carry out this configuration only if the vehicle is not equipped with a Navigation system)
This command, on **New Twingo**, is used to configure the luminosity level of the display screen by selecting the type of radio.
This command, on **Clio III**, is used to configure the luminosity level of the display screen by selecting the type of radio, and to confirm the option with or without dimmer.

NOTE: The two types of radio can be distinguished as follows: radio R02 has a telephone button, radio R01 does not.

VP001: "Write VIN"

This command permits manual entry of the vehicle's VIN into the computer. Use this command each time the computer is replaced. The VIN number is inscribed on the manufacturer's plate.

Procedure for writing the VIN
– Establish dialogue with the computer of the multimedia connection unit
– Select the **Repair mode** menu.
– Select the **Other parameters** menu.
– Select line **VP001 Write VIN**.
– Enter the VIN.
– Exit fault finding mode.
– Switch off the ignition.
– Wait **5 seconds**.
– Reread the VIN in the Identification menu for confirmation (**ID008 VIN code**).

SC002: Vehicle identifier (Only for New Twingo)

This command is used to obtain the vehicle identifier. The **SC002** is used to read the "Vehicle ID" entered in the instrument panel computer and to enter it in the multimedia connection unit and in the display. The vehicle identifier is contained in this "Vehicle ID".
This command is to be used each time the computer is replaced. The radio will be locked if it does not read a correct vehicle identifier.

For information on removing and refitting the multimedia connection unit of the multimedia network, refer to the repair manual for the vehicle concerned:

If the vehicle is equipped with a Navigation computer (Only on **Clio III**):
See **MR 392, Mechanical, 83C, On-board telematics system, Multimedia network interface unit: Removal - Refitting**.

If the vehicle is not equipped with a Navigation computer:
Clio III: See **MR 392, Mechanical, 86A, Radio, Display: Removal - Refitting**.
New Twingo: See **MR 411, Mechanical, 86A, Radio, Display: Removal - Refitting**.

Operations to be carried out before replacing the multimedia network interface unit:

Note:
If the radio and the multimedia connection unit (BIC) are replaced simultaneously, the multimedia connection unit must be configured first (see Configurations and Programming).

1- Before replacing the multimedia connection unit (with Techline approval), read the faults and carry out a conformity check to check that it is actually defective.

2- After obtaining Techline approval, remove the multimedia connection unit, with the ignition off (**wait 1 minute for the system to shut down completely**).
The multimedia network interface units available from the Parts Department are supplied unconfigured.

Operations to be carried out after replacing the multimedia connection unit:

– Connect **the diagnostic tool** and switch on the system, then establish dialogue with the computer.
– **Configure the multimedia connection unit** (see **Configurations and Programming**).
– Configure the computer using command **CF007 Vehicle configuration, then perform CF012 Lighting**. Only carry out these configurations on vehicles not equipped with a Navigation system. (see **Configurations**).
– If a radio is present, configure the computer using command **CF008 Radio** (see **Configurations**).
– If a Navigation system is present, configure the computer using command **CF009 Navigation** (see **Configurations**).
– Enter the VIN code using command **VP001 Write VIN** (see **Programming**).
– Check that there are no faults and that the multimedia system is operating correctly.

Tool fault	Associated DTC	Diagnostic tool title
DF001	**9341**	Computer configuration
DF002	**9344**	Computer
DF003	**93E3**	Screen
DF005	**9303**	Supply
DF006	**9309**	Activation signal
DF007	**934C**	Computer
DF008	**934D**	Computer
DF011	**9331**	External temperature sensor circuit

DF001 PRESENT OR STORED	COMPUTER CONFIGURATION 1.DEF: Blank or incomplete configuration

NOTES	**Conditions for applying fault finding procedures to stored faults:** The fault is declared **present** after the multimedia system has been switched on.

Configure the system (see **Configurations and programming**).
If the fault is still present, contact your Techline.

AFTER REPAIR	Carry out another fault finding check on the system. Clear the stored faults using command **RZ001 Fault memory**. Deal with any other faults.

DF002 PRESENT OR STORED	COMPUTER 1.DEF: Internal electronic fault

NOTES	**Conditions for applying fault finding procedures to stored faults:** The fault is declared **present** after the multimedia system has been switched on.

If the vehicle is equipped with a Navigation computer (only on **Clio III**), replace the multimedia connection unit (see **MR 392, Mechanical, 83C, On-board telematics system, Multimedia network interface unit: Removal - Refitting**).

If the vehicle is not equipped with a Navigation computer, replace the display (see **MR 392 (Clio III) or MR 411 (New Twingo), Mechanical, 86A, Radio, Display: Removal - Refitting**).

If the fault is still present, contact your Techline.

AFTER REPAIR	Carry out another fault finding check on the system. Clear the stored faults using command **RZ001 Fault memory**. Deal with any other faults.

DF003 PRESENT OR STORED	SCREEN DEF: No communication with display

NOTES	**Conditions for applying fault finding procedures to stored faults:** The fault is declared **present** after the multimedia system has been switched on.
	If the fault is present, the display does not operate.

If the vehicle is equipped with a Navigation computer (only on **Clio III**), replace the multimedia connection unit (see **MR 392, Mechanical, 83C, On-board telematics system, Multimedia network interface unit: Removal - Refitting**).

If the vehicle is not equipped with a Navigation computer, replace the display (see **MR 392 (Clio III) or MR 411 (New Twingo), Mechanical, 86A, Radio, Display: Removal - Refitting**).

If the fault persists, contact your Techline.

AFTER REPAIR	Carry out another fault finding check on the system. Clear the stored faults using command **RZ001 Fault memory**. Deal with any other faults.

DF005 PRESENT OR STORED	SUPPLY 1.DEF: Excess voltage 2.DEF: Undervoltage

NOTES	**Conditions for applying fault finding procedures to stored faults:** The fault is declared **present** after the multimedia system has been switched on.
	Special notes: The undervoltage fault appears if the computer feed voltage is less than or equal to **7.5 V** for at least **1 second**. The overvoltage fault appears if the computer feed voltage is greater than or equal to **18.5 V** for at least **1 second**.
	Use the **Wiring Diagrams Technical Note for Clio III or New Twingo**. For a vehicle equipped with a Navigation computer, use component **1714**, Multimedia connection unit, for fault finding on the Multimedia interface unit. Otherwise use component **653**, display computer.

1.DEF	***NOTES***	None.

Check the battery and perform an alternator supply test (see **16A, Starting, Charging**).

AFTER REPAIR	Carry out another fault finding check on the system. Clear the stored faults using command **RZ001 Fault memory**. Deal with any other faults.

DF005 CONTINUED	

2.DEF	***NOTES***	None.

Remove the card from the reader or the key from the ignition, then check the condition of the battery. Check the battery: leaks, incorrectly fitted, loosened battery terminal, and corrosion. Check the earth connections of the vehicle: battery/chassis, engine/chassis, starter/engine, alternator/engine, gearbox/chassis. If the fault is detected, resolve the abnormal contact fault.
Check the battery and perform an alternator supply test (see **16A, Starting, Charging**).
Check the condition of fuse **F48 (15 A)** for **New Twingo** or fuses **F14 (5 A)**, **F2 (20 A)**, and unit fuse **710 (15 A)** for **Clio III**.
Check the **connection and condition** of the connectors of the display computer, component code **653** or of the multimedia connection unit computer, component code **1714**, depending on the vehicle equipment. 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.
Disconnect the computer connector and check the conformity of the following connections: – **BCP4** between components **260** and **653** or **1714**, – **BPT** between components **645** and **653** or **1714**, – **BPT3** between components **260** and **653** or **1714**, – **NAM** between component **653** or **1714** 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	Carry out another fault finding check on the system. Clear the stored faults using command **RZ001 Fault memory**. Deal with any other faults.

DF006 PRESENT OR STORED	ACTIVATION SIGNAL CO : Open circuit CC.0: Short circuit to earth CC.1: Short circuit to + 12 V

NOTES	**Fault finding procedure application conditions:** The fault is declared present after: The + after ignition feed is activated, then the multimedia system was switched on using the on/off button. The fault is declared stored after the vehicle is completely shut off (**1 minute** after locking).
	If the fault is **present**, the multimedia functions do not operate.
	For a vehicle equipped with a Navigation computer, use component **1714**, Multimedia connection unit, for fault finding on the Multimedia interface unit. Otherwise use component **653**, display computer.
	Use the **Wiring Diagrams Technical Note for Clio III or New Twingo**.

For a vehicle equipped with a Navigation system:
Check the connectors of the multimedia connection unit, component code **1714**, of the radio, component code **261**, of the mobile connectivity computer, component code **1959** (depending on equipment), and of the navigation computer, component code **662**.

For a vehicle not equipped with a Navigation system:
Check the connectors of the display, component code **653**, of the radio, component code **261**, and of the mobile connectivity computer, component code **1959** (depending on equipment).

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.

AFTER REPAIR	Carry out another fault finding check on the system. Clear the stored faults using command **RZ001 Fault memory**. Deal with any other faults.

DF006 CONTINUED	

Check the **insulation** to **earth and to +12 V, the continuity, and the absence of interference resistance** of the following connection:

For a vehicle equipped with a Navigation system:
- **34HU** between components **1714** and components **261**, **662**, and, depending on equipment, **1959**.

For a vehicle not equipped with a Navigation system:
- **34HU** between components **653** and components **261** and, depending on equipment, **1959**.

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 your Techline.

AFTER REPAIR	Carry out another fault finding check on the system. Clear the stored faults using command **RZ001 Fault memory**. Deal with any other faults.

DF007 PRESENT OR STORED	COMPUTER 1.DEF: Internal electronic fault

NOTES	If the fault is **present**, the multimedia function is locked and no computer (radio, radio control satellite, etc.) operates.

If the vehicle is equipped with a Navigation computer (only on **Clio III**), replace the multimedia connection unit (see **MR 392, Mechanical, 83C, On-board telematics system, Multimedia network interface unit: Removal - Refitting**).

If the vehicle is not equipped with a Navigation computer, replace the display (see **MR 392 (Clio III) or MR 411 (New Twingo), Mechanical, 86A, Radio, Display: Removal - Refitting**).

If the fault is still present, contact your Techline.

AFTER REPAIR	Carry out another fault finding check on the system. Clear the stored faults using command **RZ001 Fault memory**. Deal with any other faults.

DF008 PRESENT OR STORED	COMPUTER 1.DEF: Internal electronic fault

NOTES	If the fault is **present**, the multimedia function is locked and no computer (radio, radio control satellite, etc.) operates.

If the vehicle is equipped with a Navigation computer (only on **Clio III**), replace the multimedia connection unit (see **MR 392, Mechanical, 83C, On-board telematics system, Multimedia network interface unit: Removal - Refitting**).

If the vehicle is not equipped with a Navigation computer, replace the display (see **MR 392 (Clio III) or MR 411 (New Twingo), Mechanical, 86A, Radio, Display: Removal - Refitting**).

If the fault persists, contact your Techline.

AFTER REPAIR	Carry out another fault finding check on the system. Clear the stored faults using command **RZ001 Fault memory**. Deal with any other faults.

DF011 PRESENT OR STORED	EXTERNAL TEMPERATURE SENSOR CIRCUIT CC.0: Short circuit to earth CC.1: Open circuit or short circuit to +12 V

NOTES	**Conditions for applying the fault finding procedure to stored faults:** The fault is declared **present** after the ignition is switched off and back on.

Configure the system using **CF007 Vehicle configuration** followed by **CF012 Lighting configuration** (See **Configurations and programming**).

If the fault is still present, contact the Techline.

AFTER REPAIR	Carry out another fault finding check on the system. Clear the stored faults using command **RZ001 Fault memory**. Deal with any other faults.

NOTES	Only carry out a conformity check after a **complete check** with the **diagnostic tool**. The values shown in this conformity check are given as a guide. **Application conditions: Engine stopped, ignition on, and the radio switched on.**

MAIN SCREEN

Function	Parameter or status checked or action		Display and notes	Fault finding
Side lights	**ET004:**	+12 V Side lights	**INACTIVE** **INVALID** **OFF** **ON**	In the event of an inconsistency, run fault finding on the UCH (see **87B, Passenger compartment connection unit**).

NOTES	Only carry out a conformity check after a **complete check** with the **diagnostic tool**. The values shown in this conformity check are given as a guide. **Application conditions: Engine stopped, ignition on, and the radio switched on.**

FUNCTION: MULTIMEDIA

SUB-FUNCTION: USER SELECTION

Function	Parameter or status Checked or action	Display and notes	Fault finding
Button	**ET002:** Radio on/off button	**INACTIVE** **ACTIVE** This status remains active until the ignition is switched off.	In the event of an inconsistency, run fault finding on the radio (see **86A, Radio**)
Battery voltage	**PR002:** Battery voltage	**12 V < X < 15 V**	In the event of an inconsistency, consult the interpretation of fault **DF005 Supply**.
Vehicle speed	**PR003:** Vehicle speed	Indicates the vehicle speed in mph (km/h).	In the event of an inconsistency, run fault finding on the ABS (see **38C, Anti-lock braking system**).
External temperature	**PR004** External temperature	**-40˚C < X < 60˚C**	In the event of an inconsistency, run fault finding on the UCH (see **87B, Passenger compartment connection unit**).
System activation	**AC002:** On - Off Button	Used to simulate the On - Off Button of the radio	In the event of an inconsistency, consult the interpretation of fault **DF006 Activation signal** and run fault finding on the radio (see **86A, Radio**).

NOTES	Only carry out a conformity check after a **complete check** with the **diagnostic tool**. The values shown in this conformity check are given as a guide. **Application conditions: Engine stopped, ignition on, and the radio switched on.**

FUNCTION: MULTIMEDIA (CONTINUED)

SUB-FUNCTION: USER SELECTION

Function	Parameter or status Checked or action		Display and notes	Fault finding
Button	**ET009:**	Repeat button (only on **Clio III**)	**PRESSED** **RELEASED**	In the event of an inconsistency, consult the interpretation of status **ET009**.
	ET020:	Mute button		In the event of an inconsistency, consult the interpretation of status **ET020**.
	ET011:	+ button		In the event of an inconsistency, consult the interpretation of status **ET011**.
	ET012:	- button		In the event of an inconsistency, consult the interpretation of status **ET012**.
	ET023:	Source button		In the event of an inconsistency, consult the interpretation of status **ET023**.
	ET024:	Mode button		In the event of an inconsistency, consult the interpretation of status **ET024**.
	ET025:	Telephone button		In the event of an inconsistency, consult the interpretation of status **ET025**.
Wheel action	**ET017:**	Wheel action	**UPWARDS** **DOWNWARDS** **INACTIVE**	In the event of an inconsistency, consult the interpretation of status **ET017**.

NOTES	Only carry out a conformity check after a **complete check** with the **diagnostic tool**. The values shown in this conformity check are given as a guide. **Application conditions: Engine stopped, ignition on, and the radio switched on.**

FUNCTION: MULTIMEDIA

SUB-FUNCTION: DISPLAY

Function	Parameter or status Checked or action	Display and notes	Fault finding
Display	**AC001:** Display test	This command is used to test the liquid crystal screen of the display.	None
Lighting	**ET004:** +12 V Side lights	**OFF** **ON** **INVALID** **INACTIVE**	In the event of an inconsistency, run fault finding on the UCH (see **87B, Passenger compartment connection unit**).
	ET007: Brightness	**PANEL GAP** **NIGHT**	In the event of an inconsistency, consult the interpretation of **ALP 4 Lighting does not change when the vehicle lights are switched on**.

Tool status	Diagnostic tool title
ET002	Radio on/off button
ET004	+12 V Side lights
ET007	Brightness
ET009	Repeat button (only on **Clio III**)
ET011	+ button
ET012	- button
ET017	Wheel action
ET020	Mute button
ET023	Source button
ET024	Mode button
ET055	Telephone button

ET009	REPEAT BUTTON
ET011	+ BUTTON
ET012	- BUTTON
ET020	MUTE BUTTON
ET023	SOURCE BUTTON
ET024	MODE BUTTON
ET025	TELEPHONE BUTTON

STATUS DEFINITION	**PRESSED:** This means that the button is pressed. **RELEASED:** This means that the button is released.

NOTES	There must be no **present** or **stored** faults.
	Note: **ET009 Repeat button** is not present on the **New Twingo**.
	For a vehicle equipped with a Navigation computer, use component **1714**, Multimedia connection unit, for fault finding on the Multimedia interface unit. Otherwise use component **653**, display computer.
	Use the **Wiring Diagrams Technical Note for Clio III or New Twingo**.

Check the condition and connection:

- of the radio control satellite connector, component code **1519** (for **Clio III**) or component code **325** (for **New Twingo**).
- of the display connector, component code 653, or the multimedia connection unit connector, component code **1714**, depending on the vehicle equipment.

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.

AFTER REPAIR	Repeat the conformity check from the start.

ET009 **ET011** **ET012** **ET020** **ET023** **ET024** **ET025** **CONTINUED**	

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

- **34AT** between components **1519 (or 325)** and **653 (or 1714)**,
- **34AR** between components **1519 (or 325)** and **653 (or 1714)**,
- **34AS** between components **1519 (or 325)** and **653 (or 1714)**,
- **34AQ** between components **1519 (or 325)** and **653 (or 1714)**,
- **34AU** between components **1519 (or 325)** and **653 (or 1714)**,
- **34AP** between components **1519 (or 325)** and **653 (or 1714)**.
- **34AO** between components **1519 and 653 (or 1714)** (only for **Clio III**).

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

Replace the radio control satellite (see **MR 392 (Clio III) or MR 411 (New Twingo), Mechanical, 86A, Radio, Radio satellite control: Removal - Refitting**).

If the vehicle is equipped with a Navigation computer (only on **Clio III**), replace the multimedia connection unit (see **MR 392, Mechanical, 83C, On-board telematics system, Multimedia network interface unit: Removal - Refitting**).

If the vehicle is not equipped with a Navigation computer, replace the display (see **MR 392 (Clio III) or MR 411 (New Twingo), Mechanical, 86A, Radio, Display: Removal - Refitting**).

If the fault is still present, contact Techline.

AFTER REPAIR	Repeat the conformity check from the start.

ET017	WHEEL ACTION

STATUS DEFINITION	**Downwards:** This means that the wheel is turned downwards. **Upwards:** This means that the wheel is turned upwards. **Inactive:** This means that there is no action on the wheel.

NOTES	There must be no **present** or **stored** faults.
	For a vehicle equipped with a Navigation computer, use component **1714**, Multimedia connection unit, for fault finding on the Multimedia interface unit. Otherwise use component **653**, display computer.
	Use the **Wiring Diagrams Technical Note for Clio III or New Twingo**.

Check the condition and connection:

- of the radio control satellite connector, component code **1519** (for **Clio III**) or component code **325** (for **New Twingo**).
- of the display connector, component code **653**, or the multimedia connection unit connector, component code **1714**, depending on the vehicle equipment.

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.

Using the universal bornier, check the insulation, continuity and the absence of interference resistance on the following connections:

- **34AT** between components **1519 (or 325)** and **653 (or 1714)**,
- **34AR** between components **1519 (or 325)** and **653 (or 1714)**,
- **34AS** between components **1519 (or 325)** and **653 (or 1714)**,
- **34AQ** between components **1519 (or 325)** and **653 (or 1714)**,
- **34AU** between components **1519 (or 325)** and **653 (or 1714)**,
- **34AP** between components **1519 (or 325)** and **653 (or 1714)**.
- **34AO** between components **1519 and 653 (or 1714)** (only for **Clio III**).

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

AFTER REPAIR	Repeat the conformity check from the start.

ET017 CONTINUED	

Replace the radio control satellite (see **MR 392 (Clio III) or MR 411 (New Twingo), Mechanical, 86A, Radio, Radio satellite control: Removal - Refitting**).
If the vehicle is equipped with a Navigation computer (only on **Clio III**), replace the multimedia connection unit (see **MR 392, Mechanical, 83C, On-board telematics system, Multimedia network interface unit: Removal - Refitting**). If the vehicle is not equipped with a Navigation computer, replace the display (see **MR 392 (Clio III) or MR 411 (New Twingo), Mechanical, 86A, Radio, Display: Removal - Refitting**).
If the fault is still present, contact Techline.

AFTER REPAIR	Repeat the conformity check from the start.

Tool Parameter	Diagnostic tool title
PR002	Battery voltage
PR003	Vehicle speed
PR004	External temperature

Tool command	Diagnostic tool title	Description
RZ001:	Fault memory	This command is used for clearing the stored faults from the computer.
AC001:	Display test	This command is used to test the liquid crystal screen of the display.
AC002:	On/Off Button	This command is used to simulate the pressing of the On/Off button of the radio.

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

NO DIALOGUE WITH THE COMPUTER	**ALP 1**
THE RADIO CONTROL SATELLITE DOES NOT OPERATE OR OPERATES POORLY	**ALP 2**
THE VOLUME DOES NOT INCREASE WITH THE VEHICLE SPEED	**ALP 3**
THE RADIO AND/OR THE DISPLAY REMAINS LIT FOR 1 MINUTE AFTER LOCKING THE VEHICLE (ON NEW TWINGO ONLY)	**ALP 4**

ALP 1	No dialogue with the computer

NOTES	For a vehicle equipped with a Navigation computer, use component **1714**, Multimedia connection unit, for fault finding on the Multimedia interface unit. Otherwise use component **653**, display computer.
	Use the **Wiring Diagrams Technical Note for Clio III or New Twingo**.

Try to establish dialogue with a computer on another vehicle to check that **the diagnostic tool** is not faulty. If the **diagnostic tool** is not causing the fault and dialogue cannot be established with any other computer on the same vehicle, it may be that a faulty computer is disrupting the fault finding line.
Use a process of successive disconnections to locate this computer.
Check the battery voltage, component code **107**, and perform the necessary operations to obtain the correct voltage **(12 V < X < 15 V)**.

↓

Check the presence and condition of the computer supply fuses:
– for **New Twingo: F48 (15 A)**,
– for **Clio III: F14 (5 A), F2 (20 A)** and **unit fuse 710 (15 A)**.
Check the connection of the display connector, component code **653**, or the multimedia connection unit connector, component code **1714**, and the condition of its connections.
If the connector(s) is 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 that the computer is correctly supplied by checking the following connections:
– **BCP4** between components **260** and **653** or **1714**,
– **BPT** between components **645** and **653** or **1714**,
– **BPT3** between components **260** and **653** or **1714**,
– **NAM** between component **653** or **1714** and **earth**.
If the connection(s) 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.

↓

A

AFTER REPAIR	When communication is established, deal with any faults indicated.

ALP 1 CONTINUED	

A

Check that the diagnostic socket, component code **225**, is correctly supplied on the following connections:
– for **New Twingo**:
  – **BP19** between components **225** and **1016 (+ before ignition feed)**,
  – **NAM** and **MAN** (left-hand drive) or **MAM** (right-hand drive) of component **225**.
– for **Clio III**:
  – **BP32** between components **225** and **260 (+ before ignition feed)**,
  – **NAM** and **MK** of component **225**.

Check **the continuity** and **insulation** of the following connections:
– **107W** and **107X** between components **225** and **653** or **1714**,
– **133B** and **133C** between components **225** and **653** or **1714**.

If the connection(s) 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 dialogue is still not established after these various checks, replace the computer, component code **653** (see **MR 392 (Clio III) or MR 411 (New Twingo), Mechanical, 86A, Radio, Display: Removal - Refitting**) or **1714** (see **MR 392 (Clio III), Mechanical, 83C, On-board telematics system, Multimedia network interface unit: Removal - Refitting**).

If the fault is still present, contact Techline.

AFTER REPAIR	When communication is established, deal with any faults indicated.

ALP 2	**The radio control satellite does not operate or operates poorly**

NOTES	For a vehicle equipped with a Navigation computer, use component **1714**, Multimedia connection unit, for fault finding on the Multimedia interface unit. Otherwise use component **653**, display computer.
	Use the **Wiring Diagrams Technical Note for Clio III or New Twingo**.

Does the display operate? — NO → See **ALP1 No dialogue with the computer**.

YES ↓

Check **the statuses** of the radio control satellite (see **Conformity check**)

Are the checks correct? — YES → Contact the Techline.

NO ↓

(A)

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

ALP 2 CONTINUED 1	

A

NO

Check **the condition** and **the connection** of the satellite control connector, component code **325** (**New Twingo**) or **1519** (**Clio III**).
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 **continuity**, **insulation** and the **absence of interference resistance** on the following connections:

- **34AT**, between components **653** or **1714** and **325** (**New Twingo**) or **1519** (**Clio III**),
- **34AR**, between components **653** or **1714** and **325** (**New Twingo**) or **1519** (**Clio III**),
- **34AS**, between components **653** or **1714** and **325** (**New Twingo**) or **1519** (**Clio III**),
- **34AQ**, between components **653** or **1714** and **325** (**New Twingo**) or **1519** (**Clio III**),
- **34AU**, between components **653** or **1714** and **325** (**New Twingo**) or **1519** (**Clio III**),
- **34AP** between components **653** or **1714** and **325** (**New Twingo**) or **1519** (**Clio III**),
- **34AO** between components **653** or **1714** and **1519** (**Clio III** only).

Are the checks correct?

NO → 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.

YES

B

C

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

ALP 2 CONTINUED 2	

B

YES

Replace the radio control satellite, component code **325** (see **MR 392 (Clio III) or MR 411 (New Twingo), Mechanical, 86A, Radio, Radio satellite control: Removal - Refitting**).

If the fault is still present:
If the vehicle is equipped with a Navigation computer (only on **Clio III**), replace the multimedia connection unit (see **MR 392, Mechanical, 83C, On-board telematics system, Multimedia network interface unit: Removal - Refitting**).

If the vehicle is not equipped with a Navigation computer, replace the display (see **MR 392 (Clio III) or MR 411 (New Twingo), Mechanical, 86A, Radio, Display: Removal - Refitting**).

If the fault is still present, contact Techline

C

If the fault is still present, contact Techline.

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

ALP 3	**The volume does not increase with the vehicle speed.**

NOTES	Consult the user manual to make the adjustments.

Check the value of the volume correction according to the speed.

Is the value 0?

YES → Put the value to **2**.

NO ↓

Contact the Techline.

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

ALP 4	**The radio and/or the display remains lit for 1 minute after locking the vehicle (on New Twingo only)**

NOTES	None.

Explain to the customer that this operation is normal on **New Twingo**.

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