

TWINGO

8 Electrical equipment

86A RADIO

R01-08

Vdiag No.: A4

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V2

Edition Anglaise

"The repair procedures given by the manufacturer in this document are based on the technical specifications current when it was prepared.

The procedures may be modified as a result of changes introduced by the manufacturer in the production of the various component units and accessories from which his vehicles are constructed."

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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 / New Twingo**

Function concerned: **RADIO**

Computer name: **R1-08**

Vdiag No.: **A4**

2. PREREQUISITES FOR FAULT FINDING

Documentation type

Fault finding procedures (this document):

- Assisted fault finding (integrated into the **diagnostic tool**), Dialogys.

Wiring Diagrams:

- Visu - Schéma.

Type of diagnostic tools

- **CLIP**

Special tooling required

Special tooling required
Diagnostic tool
Multimeter
Elé. 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-operated/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 the + after ignition feed, proceed as follows:

For vehicles with radio frequency remote control/key, 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 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 the faults should be taken into consideration when the **diagnostic tool** is used after the **+ after ignition feed** has been activated (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 faulty component,
- the condition of the wires (melted or cut insulation, wear).

Conformity check

The purpose of the conformity check is to check data that does not produce 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 repair.

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

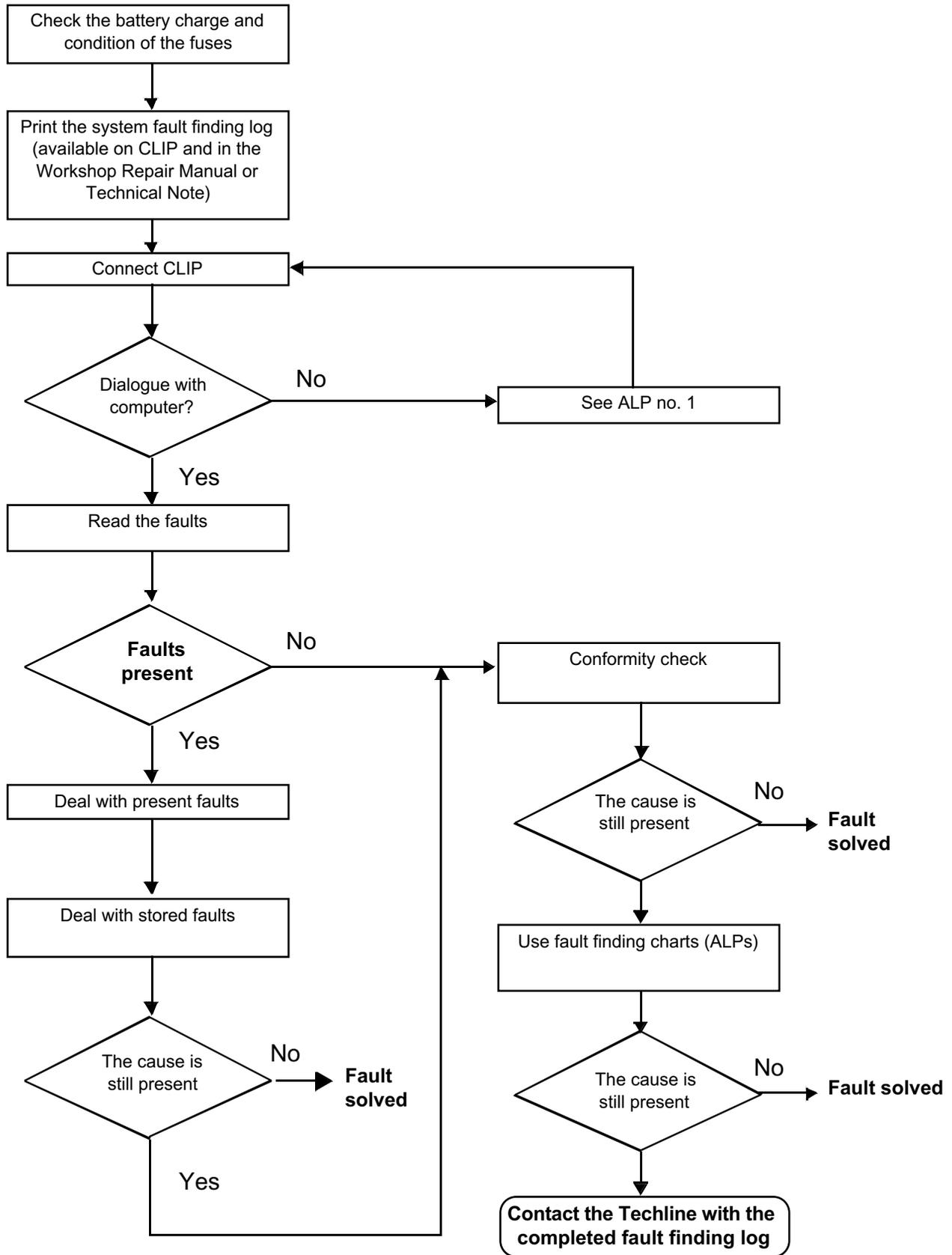
If a status is not behaving normally or a parameter is outside permitted tolerance values, you should consult the corresponding fault finding page.

Customer complaints - Fault finding chart

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

A 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 clear the cause of a fault. Electrical measurements of voltage, resistance and insulation are generally correct, especially if the fault is not present when the analysis is 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

When handling the wiring, use the **diagnostic tool** to detect any change in the status of the faults from "stored" to "present".

Make sure that the connectors are firmly secured.

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 is **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: $0 \Omega < X < 2 \Omega$ 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: $0 \Omega < X < 2 \Omega$.

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.

Fault finding – Introduction

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

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.

5. Visual inspection of the sealing:

(Only for watertight connectors)

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

If a fault is detected, consult **Technical Note 6015A, Repairing electrical wiring**.

5. FAULT FINDING LOG



IMPORTANT!

IMPORTANT

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

**IT IS THEREFORE 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,
- when requesting approval before replacing parts for which approval is compulsory,
- to be attached to monitored parts for which reimbursement is requested. The log is needed for warranty reimbursement, and enables better analysis of the parts removed.

6. SAFETY INSTRUCTIONS

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.

Fault finding – List and location of components

For Clio III

Location of components in the passenger compartment



Radio control satellite



Radio

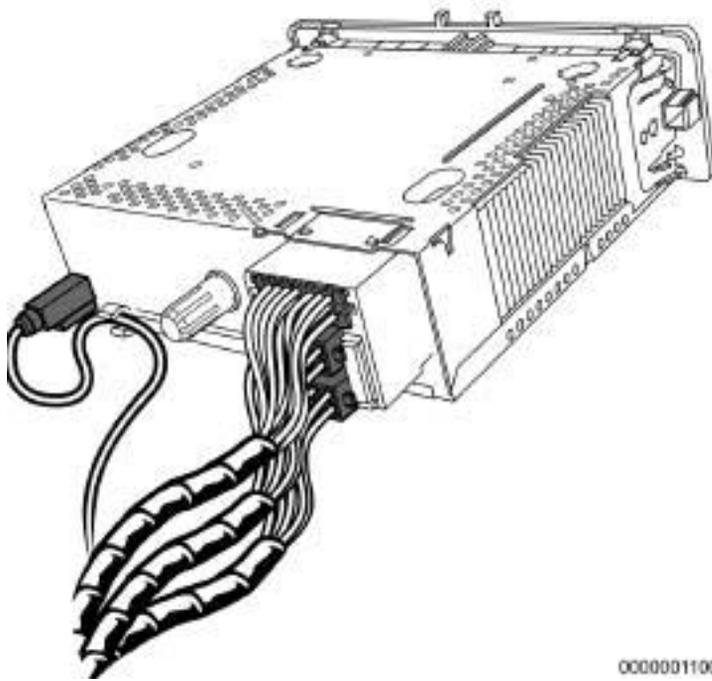


Display



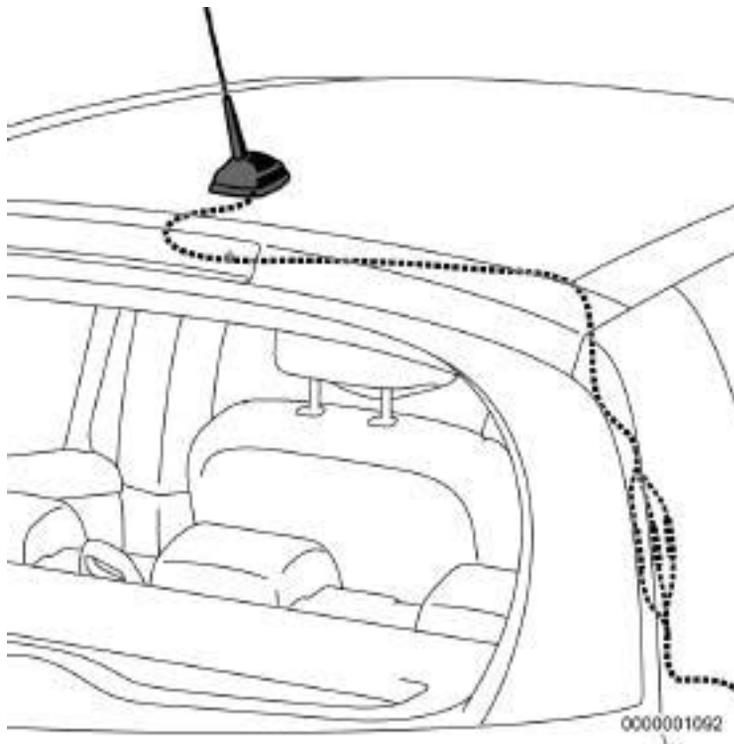
Fault finding – List and location of components

Rear view of the ISO radio connection



000001100

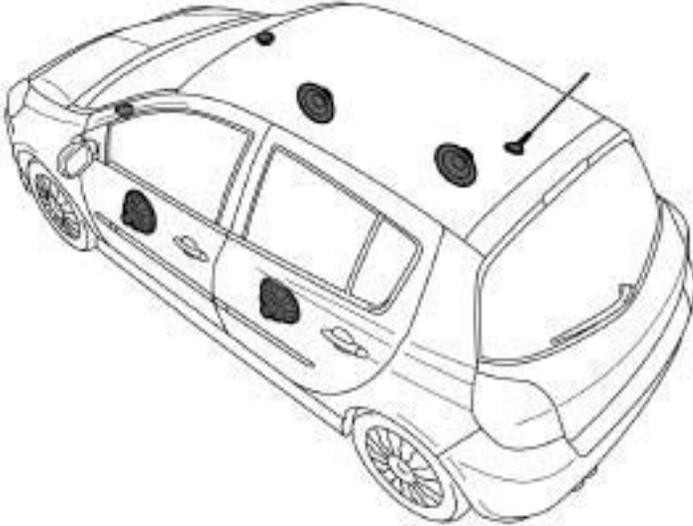
Aerial with amplifier



000001092

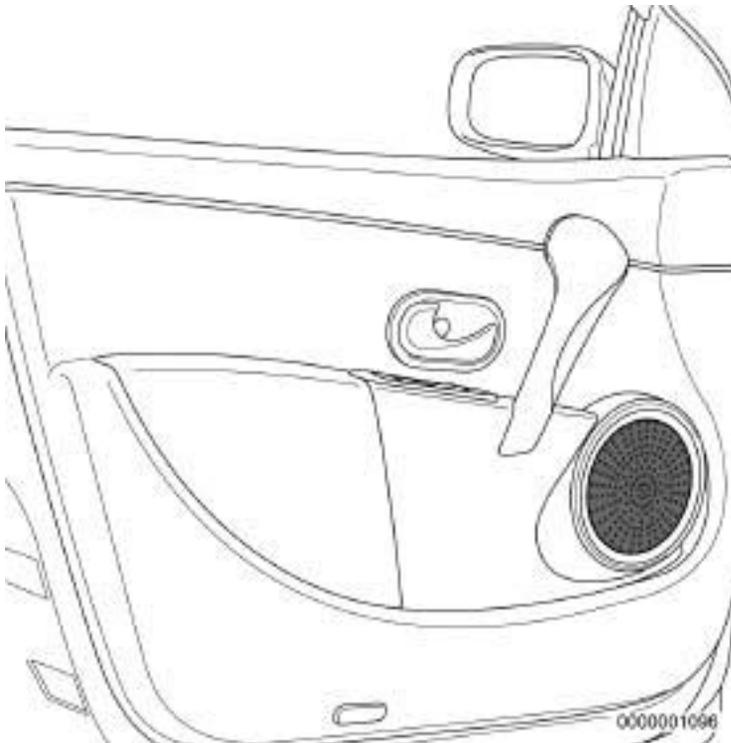
Fault finding – List and location of components

General location of the speakers and tweeters (tweeters fitted depending on vehicle equipment)



000001088

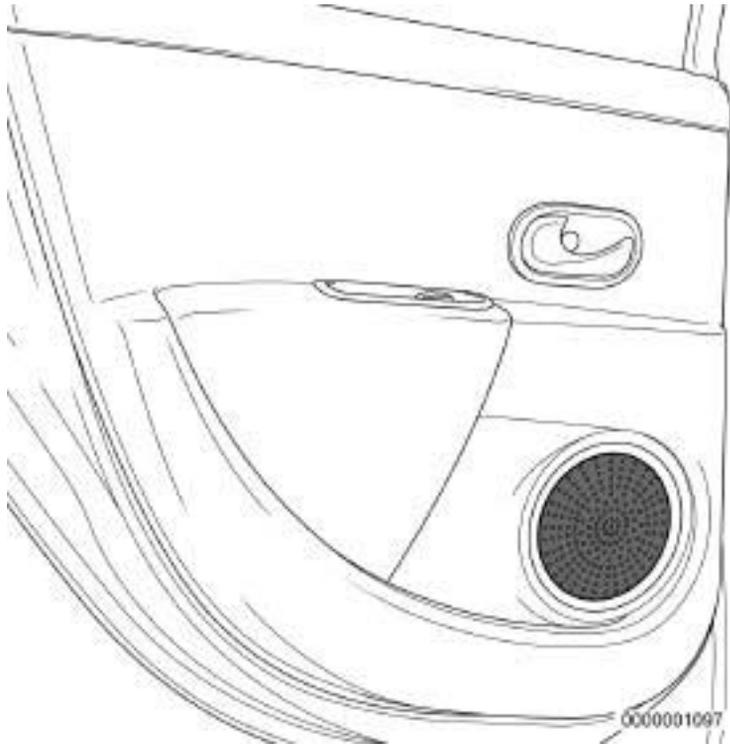
Front left-hand speaker



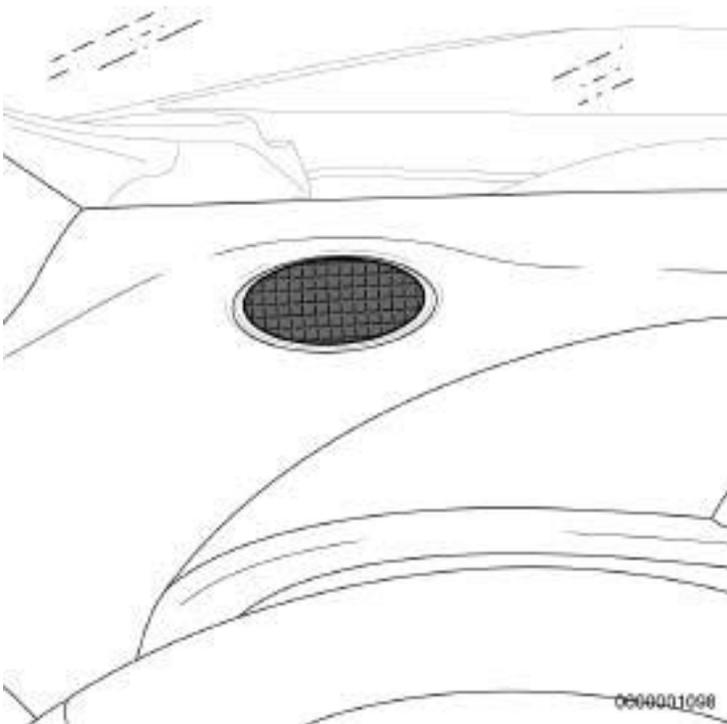
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Fault finding – List and location of components

Rear right-hand speaker



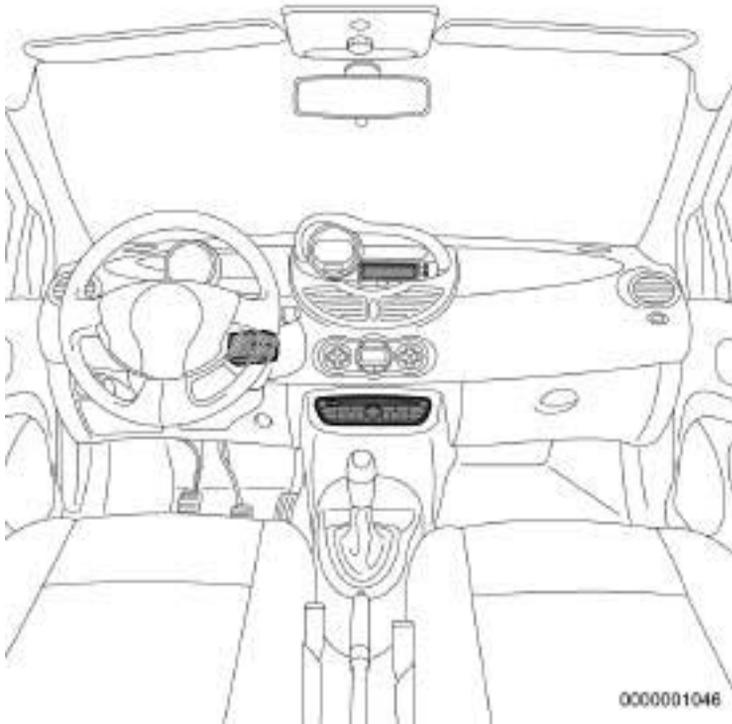
Front left-hand tweeter (fitted depending on equipment)



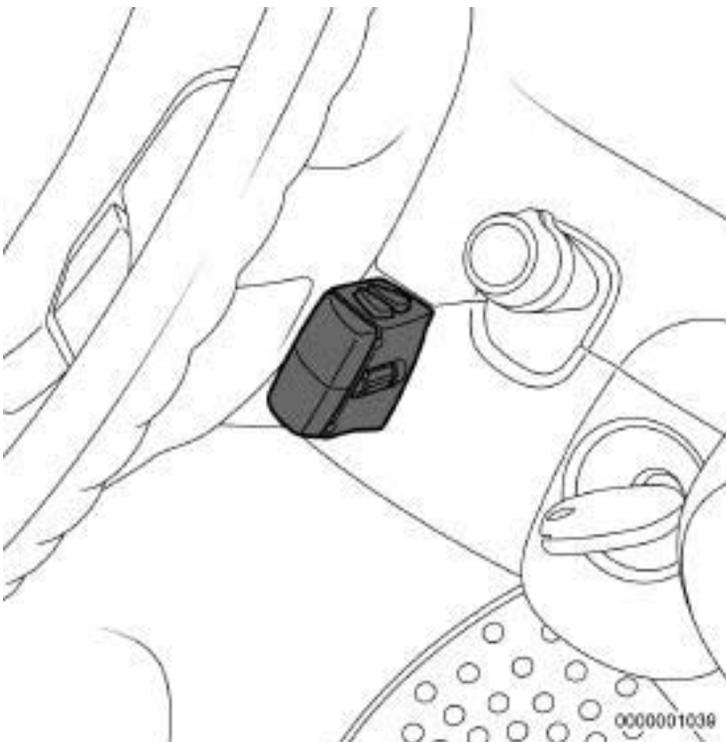
Fault finding – List and location of components

For New Twingo

Location of components in the passenger compartment

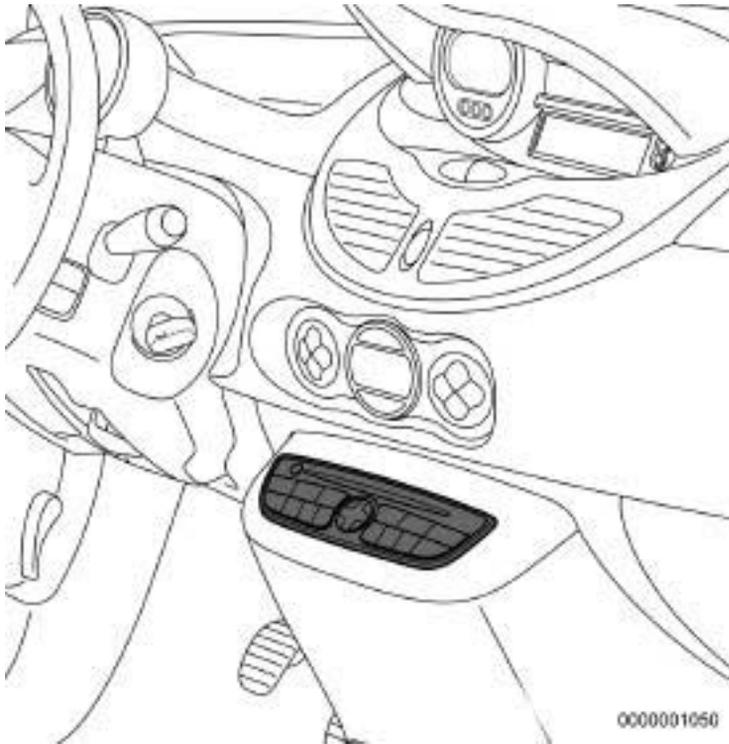


Radio control satellite

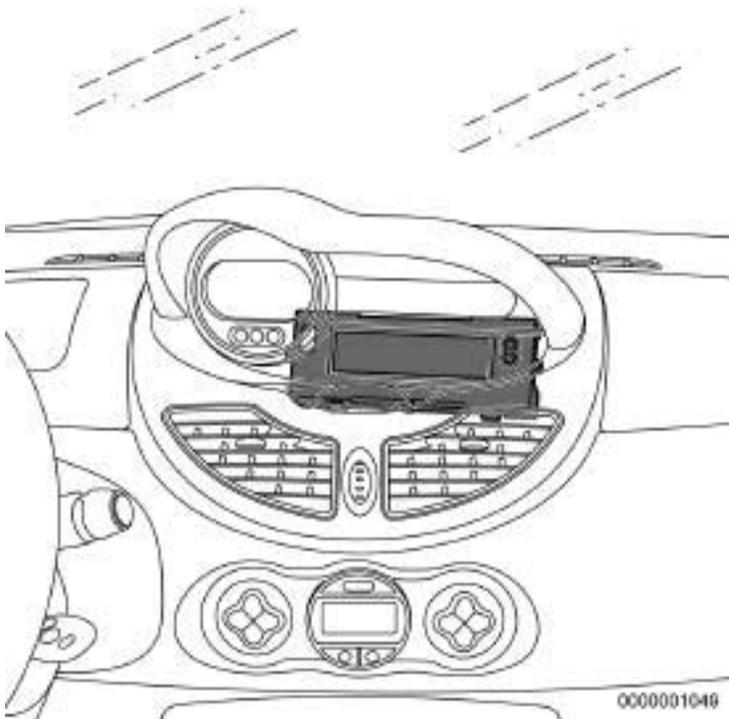


Fault finding – List and location of components

Radio

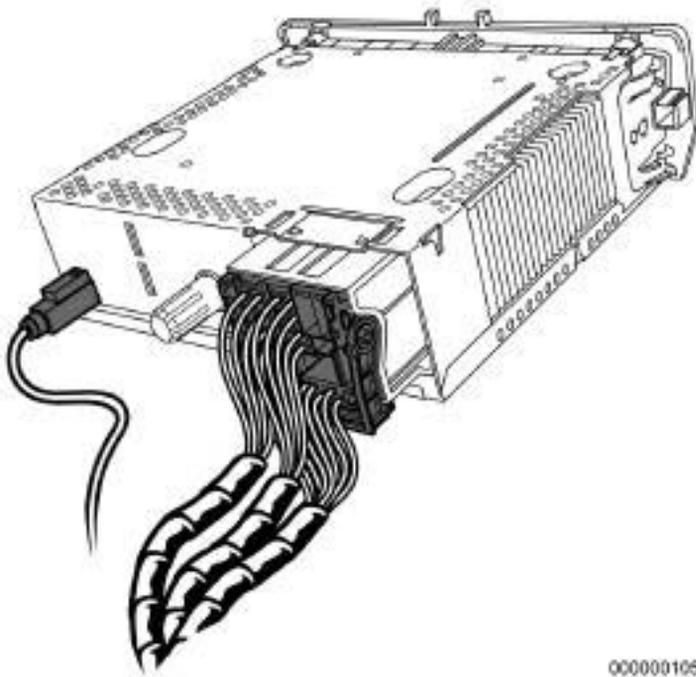


Display

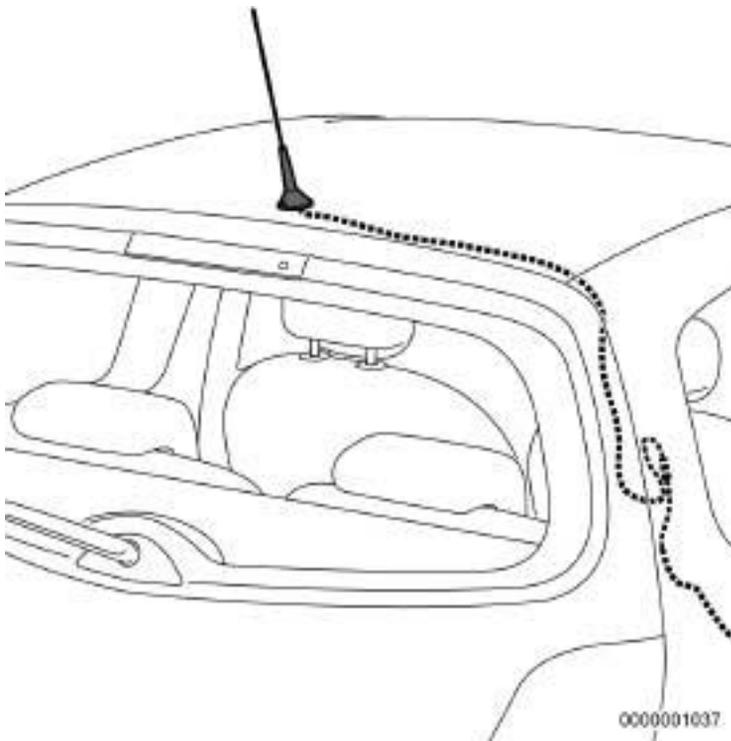


Fault finding – List and location of components

Rear view of the FAKRA radio connection

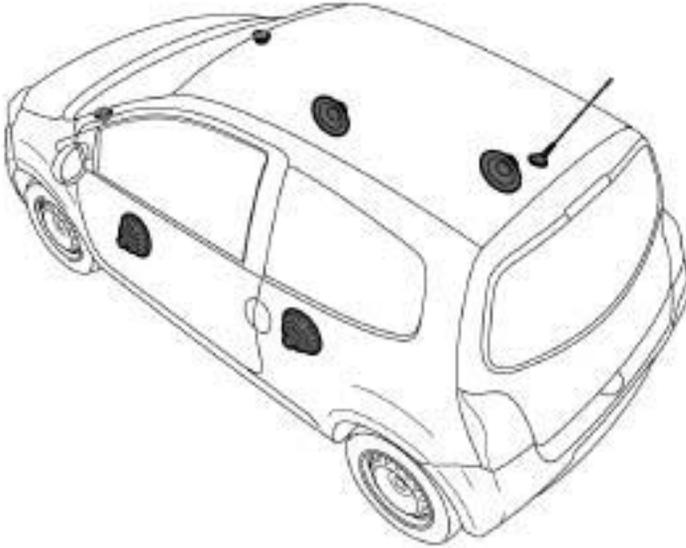


Aerial with amplifier



Fault finding – List and location of components

General location of the speakers and tweeters (tweeters fitted depending on vehicle equipment).



000001034

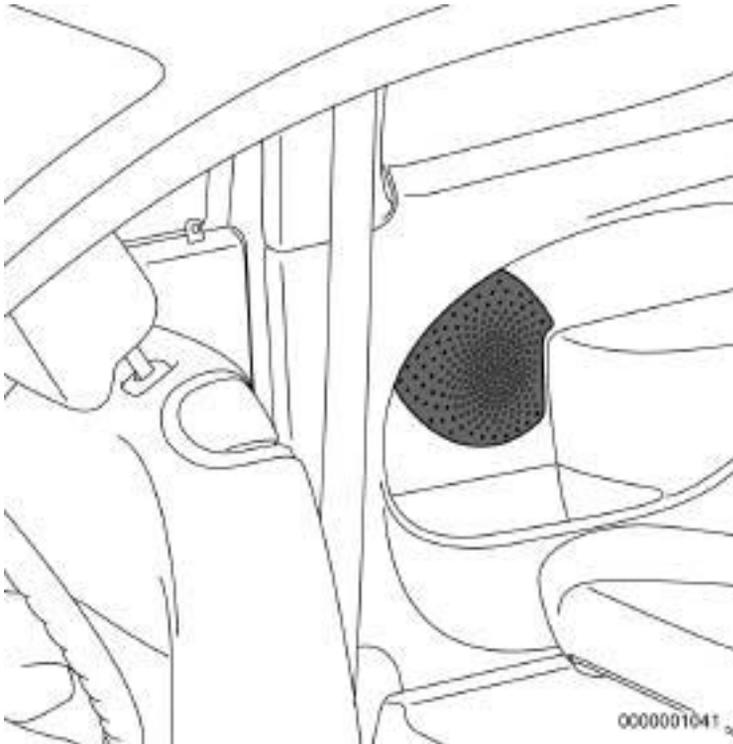
Front left-hand speaker



000001040

Fault finding – List and location of components

Rear right-hand speaker



Front left-hand tweeter (fitted depending on equipment)



Fault finding – Role of components

Role of main components

The radio computer manages the various multimedia system functions according to user requests and transmits audio data to the vehicle via the speakers.

The radio uses an amplified aerial system to improve radio reception.
The aerial amplifier is incorporated into the roof aerial.

The speakers reproduce the radio system's sound inside the vehicle.

The microphone allows the telephone to be used in hands-free mode via a Bluetooth connection.

The tweeters reproduce the high-frequency sounds of the radio system.

The multimedia interface 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 interface unit (Display or Multimedia connection unit) transmits the activation signal to the radio and to the other computers that participate in the multimedia function when the user activates the radio button.

The display shows various multimedia information such as the radio information, the time, etc.

The radio control satellite allows various functions of the radio to be accessed.

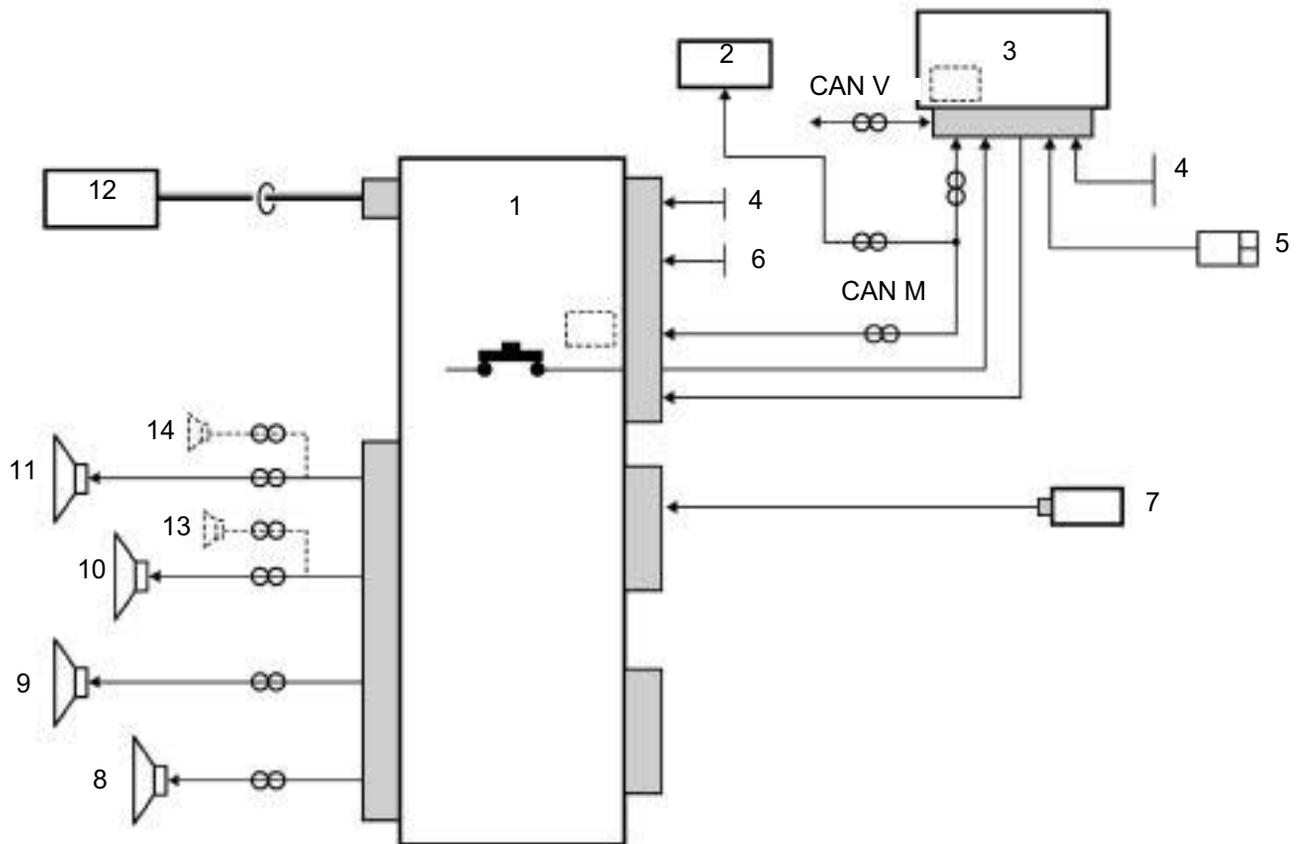
Fault finding – Operating diagram

I. LIST OF COMPONENTS

Number	Description
1	Radio
2	Diagnostic socket
3	Display
4	Supply
5	Radio control satellite
6	Earth
7	Mobile connectivity terminal (RCA type)

Number	Description
8	Rear right-hand speaker
9	Rear left-hand speaker
10	Front right-hand speaker
11	Front left-hand speaker
12	Aerial
13	Front right-hand tweeter (depending on equipment)
14	Front left-hand tweeter (depending on equipment)

II. LOCATION OF COMPONENTS



000001050

The **radio** includes the following functions:

- Radio reception (AM, FM).
- CD/MP3 playing.

The system offers the following possibilities:

- Choose FM radio stations using the presets, the list or manual selection.
- Have access to an automatically updated FM radio list.
- Listen to CDs and MP3s.
- Control the radio using the radio control satellite.
- Have access to optimised audio and acoustic telephone configurations for each vehicle.
- Modify various acoustic parameters (base, treble, front/rear balance, etc.).
- Benefit from a connection for a CD changer.
- Possibility of connecting a peripheral with a USB port, Jack socket, etc.
- Anti-theft protection.

Computer activation system

The radio has an activation system.

The radio is switched on under the following conditions:

- by pressing the radio ON/OFF button,
- when the engine is started, the radio is switched on automatically.

The radio is switched off under the following conditions:

- The ignition is switched off.
- Door opened (**Clio III**)
- **1 minute** after a door is opened (**New Twingo**)
- By pressing the radio ON/OFF button (**Clio III** and **New Twingo**).
- In the last case, if the vehicle engine is running, the radio will be switched off from a user point of view, but will be considered operational from an electrical point of view. If the ignition is switched off, the radio will be off.

The computer activation system is managed by the UCH, which activates the display with a timed + battery supply. The activated display in turn activates all of the computers involved in the multimedia function

Fault finding – Anti-theft code

Thermal protection

Thermal protection is integrated in order to protect the radio.
The functions are restored when the internal temperature falls below 80°C.

Car radio code

The radio is protected by a two-part anti-theft system:

- A 4-digit code,
- Information exchanged between the instrument panel and the radio.

This code is requested in the following cases:

- New vehicle,
- New radio,
- When a radio is swapped between vehicles.

The radio is protected by a four digit code. This code must be entered using the radio control satellite or the radio keypad.

Entering the code using the radio control satellite:

Press the lower button on the control to confirm an entry.

Entering the code using the radio:

Enter the digits using buttons 1, 2, 3 and 4, and then confirm with button 6.

If the code is entered incorrectly, the radio will be locked (**1 minute** for the first error, **2 minutes** for the second error, **4 minutes** for the third error, etc., for a maximum of **32 minutes after each attempt**).
After several attempts, if the fault is still present, contact the Techline.

Some configurations must be programmed after the code has been entered for the first time (see **Configuration - Parameters**). These settings are stored when the battery is disconnected.

Reminder:

The radio will operate for approximately **2 minutes** in scrambled mode without the code having been entered (with regular warning beeps).

Note:

If the battery is disconnected, it is not necessary to re-enter the radio anti-theft code.

Fault finding – Anti-theft code recovery procedure

The pre-code is recovered by consulting **ID007 Radio programming key** using the **diagnostic tool** or by removing the radio and noting the four characters on the barcode following the letter T (see photo below).



There are three ways to recover the radio code (4 digits):

1. Only the VIN is available: connect to code management on Renault.Net and enter the VIN. The code server gives the original radio code entered in the World Vehicle Database (BVM).

If the code has not been entered in the BVM or is incorrect when the code is entered in the radio, follow the procedure below:

2. The pre-code is available: go back to code management on Renault.Net, enter the pre-code and obtain the radio code.

If this code is correct, the radio will operate again; if not, follow the procedure below:

3. On Renault.Net, write a help message to be sent to the assistance unit.

WHEN REPLACING PARTS, OR FOR AN UNKNOWN VIN, WRITE A HELP MESSAGE IN CODE MANAGEMENT ON RENAULT.NET TO UPDATE THE DATABASE.

Fault finding – Configurations

Available configuration and operating mode

SC002 Computer configuration.

This configuration is used to configure the computer according to the vehicle equipment level.

Reread the configuration in the "configuration reading" menu to confirm that the modification was correctly stored using the configuration readings.

Configuration modification procedure:

- Activate the + after ignition feed.
- Connect the **diagnostic tool** and switch on the radio.
- Establish dialogue with the computer.
- Select the **Repair mode** menu.
- Select the **Configuration and programming** menu.
- Select the special command **SC002 Computer configuration**.
- Select the connection in the drop-down menu that corresponds to the vehicle.
- Click on **Confirm**.
- Exit diagnostic mode (ends dialogue with the computer without **switching off** the tool), switch off the ignition for **30 seconds** and then switch the ignition back on.
- Establish dialogue with the computer.
- Check to see that the configurations have been correctly stored in the **Configuration reading** menu.

Fault finding – Programming

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 navigation computer.
- Select the **Repair mode** menu.
- Select the **Other configuration** menu.
- Select line **VP001 Enter VIN**.
- Enter the VIN.
- Exit fault finding mode.
- Switch off the ignition.
- Wait for the end of the Powerlatch* phase (**20 minutes** maximum).
- Reread the VIN in the **Identification** menu to confirm **ID014 VIN code**.

VP003: Enter After-Sales operation date

This command is used to enter the date of the last After-Sales operation on the radio.

Consecutively enter the six figures of the date: two for the day, two for the month and two for the year.
For example: 060700 (6 July 2000).

Reread the date of the last After-Sales operation in the **Identification** menu to confirm **ID005 Last After-Sales operation date**.

*Powerlatch: Time required for injection computer supply after + 12 V after ignition feed cut-off.

Fault finding – Replacement of components

To remove and refit the radio, consult the Repair Manual for the vehicle concerned:

- **Clio III** (see **MR 392, Mechanical, 86A, Radio, Radio: Removal - Refitting**).
- **New Twingo** (see **MR 411, Mechanical, 86A, Radio, Radio: Removal - Refitting**).

Operations to perform before replacing the radio computer:

- With the approval of the Techline, read the fault code and perform the conformity check to determine whether the fault is detected before replacing the computer.
- Remove any CDs before removing the computer or when replacing the CD changer.
- Switch off the ignition and remove the computer.

Operations to perform after replacing the radio computer:

- Connect the **diagnostic tool**, switch on the radio and establish dialogue with the computer.
- **For New Twingo: before configuring the radio, it is essential to correctly configure the display** (see **86D, Multimedia connection unit**).
- Configure the computer using special command **SC002 Computer configuration** (see **Configuration**).
- Enter the VIN code using command **VP001 Write VIN** (see **Programming**).
- Enter the computer replacement date using command **VP003 Enter After-Sales operation date** (see **Programming**).
- Check that there are no faults and that the radio functions correctly, then enter the anti-theft code if the radio requests it (see **Anti-theft code**).

Fault finding – Fault summary table

Tool fault	Associated DTC	Diagnostic tool title
DF001	930D	Front right-hand speaker
DF002	930F	Front left-hand speaker
DF003	930B	Rear right-hand speaker
DF004	9311	Rear left-hand speaker
DF006	9315	FM1 amplifier
DF022	936A	CD changer
DF023	9368	CD changer
DF024	936B	CD changer
DF028	935C	Computer
DF029	9344	Computer
DF030	9341	Computer configuration
DF032	934A	Computer
DF033	934B	Computer
DF039	93F0	Battery voltage
DF040	93D4	No audio CD changer signals
DF043	93D5	No audio CD changer signals
DF046	9341	Locked unit
DF055	93CF	Button jammed
DF057	9358	Disc error
DF058	936C	CD changer overheating
DF064	9327	Activation signal
DF080	9341	Excessive temperature
DF081	93CE	CD changer button jammed

Fault finding – Interpretation of faults

DF001 PRESENT OR STORED	FRONT RIGHT-HAND SPEAKER CC.0: Short circuit to earth CC.1: Short circuit to + 12 V CO: Open circuit 1.DEF: Short circuit between lines
--	--

NOTES	<p>Conditions for applying fault finding procedures to stored faults: The fault is declared present after:</p> <ul style="list-style-type: none"> – The multimedia system was switched on using the on/off button for at least 10 seconds, – Command AC004 Front right-hand speakers line test was run. – The fault can only be detected if the battery voltage is between: 12 V < X < 15 V.
	Use the Wiring Diagrams Technical Note for Clio III or New Twingo.

Check the **condition and connection** of the connectors of the **radio 261**, of the front right-hand tweeter **365**, of the front right-hand speaker **1598** (left-hand drive) or **1597** (right-hand drive) (bent or broken tabs, etc.).

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.

Disconnect the connector of component **1598** (left-hand drive) or **1597** (right-hand drive) (see **MR 392 (Clio III) or MR 411 (New Twingo) Mechanical, 86A, Radio, Front speaker: Removal - Refitting**).

Measure the resistance of component **1598** (left-hand drive) or **1597** (right-hand drive) using a multimeter, with the ignition off.

If the resistance is not between: $3.5 \Omega < X < 4.5 \Omega$, replace component **1598** (left-hand drive) or **1597** (right-hand drive) (see **MR 392 (Clio III) or MR 411 (New Twingo) Mechanical, 86A, Radio, Front speaker: Removal - Refitting**).

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

- **34E** between components **261** and **365**, **1598** (left-hand drive) or **1597** (right-hand drive),
- **34F** between components **261** and **365**, **1598** (left-hand drive) or **1597** (right-hand drive).

If the connection(s) are faulty and there is a repair method (see **Technical Note 6015A, Repairing electrical wiring, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.

If the fault persists, contact your Techline.

AFTER REPAIR	Carry out another fault finding check on the system. Clear the stored faults using command RZ003 Fault memory . Deal with any other faults.
---------------------	--

Fault finding – Interpretation of faults

DF002 PRESENT OR STORED	<u>FRONT LEFT-HAND SPEAKER</u> CC.0: Short circuit to earth CC.1: Short circuit to + 12 V CO: Open circuit 1.DEF: Short circuit between lines
--	--

NOTES	Conditions for applying fault finding procedures to stored faults: The fault is declared present after: – The multimedia system was switched on using the on/off button for at least 10 seconds , – Command AC005 Front left-hand speaker line test was run, – The fault can only be detected if the battery voltage is between: 12 V < X < 15 V.
	Use the Wiring Diagrams Technical Note for Clio III or New Twingo.

Check the **condition and connection** of the connectors of the **radio 261**, of the front right-hand tweeter **366**, of the front right-hand speaker **1597** (left-hand drive) or **1598** (right-hand drive) (bent or broken tabs, etc.).

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.

Disconnect the connector of component **1597** (left-hand drive) or **1598** (right-hand drive) (see **MR 392 (Clio III) or MR 411 (New Twingo) Mechanical, 86A, Radio, Front speaker: Removal - Refitting**).

Measure the resistance of component **1597** (left-hand drive) or **1598** (right-hand drive) using a multimeter, with the ignition off.

If the resistance is not between: **3.5 Ω < X < 4.5 Ω**, replace component **1597** (left-hand drive) or **1598** (right-hand drive) (see **MR 392 (Clio III) or MR 411 (New Twingo) Mechanical, 86A, Radio, Front speaker: Removal - Refitting**).

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

- **34G** between components **261** and **366**, **1597** (left-hand drive) or **1598** (right-hand drive),
- **34H** between components **261** and **366**, **1597** (left-hand drive) or **1598** (right-hand drive).

If the connection(s) are faulty and there is a repair method (see **Technical Note 6015A, Repairing electrical wiring, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.

If the fault persists, contact your Techline.

AFTER REPAIR	Carry out another fault finding check on the system. Clear the stored faults using command RZ003 Fault memory . Deal with any other faults.
---------------------	--

Fault finding – Interpretation of faults

DF003 PRESENT OR STORED	<u>REAR RIGHT-HAND SPEAKER</u> CC.0: Short circuit to earth CC.1: Short circuit to + 12 V CO: Open circuit 1.DEF: Short circuit between lines
--	---

NOTES	<p>Conditions for applying fault finding procedures to stored faults: The fault is declared present after:</p> <ul style="list-style-type: none"> – The multimedia system was switched on using the on/off button for at least 10 seconds, – Command AC006 Rear right-hand speaker line test was run, – The fault can only be detected if the battery voltage is between: 12 V < X < 15 V.
	Use the Wiring Diagrams Technical Note for Clio III or New Twingo.

Check the **condition and connection** of the connectors of **radio 261** and of the rear right-hand speaker **189** (bent or broken tabs, etc.).

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.

Disconnect the connector of component **189** (see **MR 392 (Clio III) or MR 411 (New Twingo) Mechanical, 86A, Radio, Rear speaker: Removal - Refitting**).

Measure the resistance of component **189** using a multimeter, with the ignition off.

If the resistance is not between: **3.5 Ω < X < 4.5 Ω**, replace component **189** (see **MR 392 (Clio III) or MR 411 (New Twingo) Mechanical, 86A, Radio, Rear speaker: Removal - Refitting**).

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

- **34D** between components **261** and **189**,
- **34C** between components **261** and **189**.

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 replace it.

If the fault persists, contact your Techline.

AFTER REPAIR	Carry out another fault finding check on the system. Clear the stored faults using command RZ003 Fault memory . Deal with any other faults.
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Fault finding – Interpretation of faults

DF004 PRESENT OR STORED	REAR LEFT-HAND SPEAKER CC.0: Short circuit to earth CC.1: Short circuit to + 12 V CO: Open circuit 1.DEF: Short circuit between lines
--	--

NOTES	Conditions for applying fault finding procedures to stored faults: The fault is declared present after: – The multimedia system was switched on using the on/off button for at least 10 seconds , – Command AC007 Rear left-hand speaker line test was run, – The fault can only be detected if the battery voltage is between: 12 V < X < 15 V.
	Use the Wiring Diagrams Technical Note for Clio III or New Twingo.

Check the **condition and connection** of the connectors of **radio 261** and of the rear left-hand speaker **190** (bent or broken tabs, etc.).

If any of the connectors are faulty and there is a repair method (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the connector, otherwise replace the wiring.

Disconnect the connector of component **190** (see **MR 392 (Clio III) or MR 411 (New Twingo) Mechanical, 86A, Radio, Rear speaker: Removal - Refitting**).

Measure the resistance of component **190** using a multimeter, with the ignition off.

If the resistance is not between: **3.5 Ω < X < 4.5 Ω**, replace component **190** (see **MR 392 (Clio III) or MR 411 (New Twingo) Mechanical, 86A, Radio, Rear speaker: Removal - Refitting**).

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

- **34A** between components **261** and **190**,
- **34B** between components **261** and **190**.

If the connection(s) are faulty and there is a repair method (see **Technical Note 6015A, Repairing electrical wiring, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.

If the fault persists, contact your Techline.

AFTER REPAIR	Carry out another fault finding check on the system. Clear the stored faults using command RZ003 Fault memory . Deal with any other faults.
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Fault finding – Interpretation of faults

DF006 PRESENT OR STORED	<u>FM1 AMPLI</u> CC.0: Short circuit to earth CC.1: Short circuit to + 12 V CO: Open circuit
--	---

NOTES	<p>Conditions for applying fault finding procedures to stored faults: The fault is declared present after the multimedia system is switched on using the on/off button. The fault can only be detected if the battery voltage is between: 12 V < X < 15 V.</p>
	Use the Wiring Diagrams Technical Note for Clio III or New Twingo.

If the vehicle is equipped with a navigation system, go on to **Part B**, otherwise go to **Part A**.

Part A:

Check the connection and condition of the aerial connectors on the radio, component code **261**, and on the roof aerial connector, component code **1208**.

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

- **34AN** between components **261** and **1208**,
- **TB13** between components **261** and **1208**.

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 replace it.

If the connections are correct, replace the roof aerial amplifier, component code **1208** (see **MR 392 (Clio III) or MR 411 (New Twingo) Mechanical, 86A, Radio, Radio aerial: Removal - Refitting**).

If the fault is still present, replace the radio (see **MR 392 (Clio III) or MR 411 (New Twingo) Mechanical, 86A, Radio, Radio: Removal - Refitting**).

If the fault persists, contact your Techline.

AFTER REPAIR	<p>Carry out another fault finding check on the system. Clear the stored faults using command RZ003 Fault memory. Deal with any other faults.</p>
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Fault finding – Interpretation of faults

**DF006
CONTINUED**

Part B:

Check the connection and condition of the aerial connectors on the radio and navigation system, component codes **261** and **662**, and of the connector on the roof aerial, component code **1874**.

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

- **46CJ** between components **261** and **662**,
- **TB82** between components **261** and **662**.

If the connection(s) are faulty and there is a repair method (see **Technical Note 6015A, Repairing electrical wiring, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.

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

- **34EP** between components **261** and **1874**,
- **TB39** between components **261** and **1874**.

If the connection(s) are faulty and there is a repair method (see **Technical Note 6015A, Repairing electrical wiring, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.

If the connections are correct, replace the roof aerial amplifier, component code **1874** (see **MR 392, Mechanical, 86A, Radio, Radio aerial: Removal - Refitting**).

If the fault is still present, replace the radio (see **MR 392, Mechanical, 86A, Radio, Radio: 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 **RZ003 Fault memory**.
Deal with any other faults.

Fault finding – Interpretation of faults

DF022 PRESENT OR STORED	<u>CD CHANGER</u> 1.DEF: Internal electronic fault
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NOTES	None.
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Check for a CD changer in the vehicle.
Check the consistency between the configuration of the radio and the vehicle equipment by reading configuration LC005 External components .
If the vehicle is equipped with a CD changer, it was fitted as an accessory. Please refer to the handbook delivered with the product.
If the fault is still present, replace the CD changer.

AFTER REPAIR	Carry out another fault finding check on the system. Clear the stored faults using command RZ003 Fault memory . Deal with any other faults.
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Fault finding – Interpretation of faults

DF023 DF024 PRESENT OR STORED	<u>CD CHANGER</u> 1.DEF: Internal electronic fault
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NOTES	The radio does not control the data provided by the CD changer.
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- Try to remove the CD and find the cause of the problem.
- Try with another CD and check to see if the system operates normally.

If the fault is still present, replace the CD changer.

AFTER REPAIR	Carry out another fault finding check on the system. Clear the stored faults using command RZ003 Fault memory . Deal with any other faults.
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Fault finding – Interpretation of faults

DF028 DF029 PRESENT OR STORED	<u>COMPUTER</u> 1.DEF: Internal electronic fault
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NOTES	Conditions for applying fault finding procedures to stored faults: The fault is declared present after the multimedia system is switched on using the on/off button.
	Status of fault detection: Fault is detected when the message appears.
	Special note: The multimedia system no longer emits sound.

Replace the radio (see **MR 392 (Clio III) or MR 411 (New Twingo) Mechanical, 86A, Radio, Radio: 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 RZ003 Fault memory . Deal with any other faults.
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Fault finding – Interpretation of faults

DF030 PRESENT OR STORED	COMPUTER CONFIGURATION 1.DEF: Blank or incomplete configuration
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NOTES	Switch on the radio.
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Configure the system (see Configuration and programming).
After configuration, switch off the ignition for 5 seconds then switch the ignition back on again.
If the fault persists, contact your Techline.

AFTER REPAIR	Carry out another fault finding check on the system. Clear the stored faults using command RZ003 Fault memory . Deal with any other faults.
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Fault finding – Interpretation of faults

DF032 DF033 PRESENT OR STORED	<u>COMPUTER</u> 1.DEF: Internal electronic fault
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NOTES	Special note: The radio no longer emits sound.
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Replace the radio (see **MR 392 (Clio III)** or **MR 411 (New Twingo) Mechanical, 86A, Radio, Radio: 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 RZ003 Fault memory . Deal with any other faults.
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Fault finding – Interpretation of faults

DF039 PRESENT OR STORED	BATTERY VOLTAGE 1.DEF: Undervoltage
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NOTES	<p>Conditions for applying fault finding procedures to stored faults: The fault is declared present after:</p> <ul style="list-style-type: none"> – The + after ignition feed is activated, – The multimedia system is switched on using the on/off button. – The battery voltage is out of range (12 V < X < 15 V).
	<p>Note: Apply this fault finding method if the fault reappears as present after having been cleared</p>
	<p>Use the Wiring Diagrams Technical Note for Clio III or New Twingo.</p>

<p>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.</p>
<p>Check the battery and perform an alternator supply test (see 16A, Starting, Charging).</p>
<p>Check the conformity of the fuse in the fuse and relay box:</p> <ul style="list-style-type: none"> • for New Twingo: F48 (15A), • for Clio III: F2 (20A) and Unit fuse 710 (15A). <p>Replace the fuse if not correct.</p>
<p>Disconnect the connector of the radio 261. Check the continuity of the earth on connection MAO (New Twingo) or MT (Clio III). If the 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.</p>
<p>Check the +12 V supply on connection BCP4 of component 261. If the supply is not correct, check the insulation, continuity and absence of interference resistance on connection code BCP4 between components 260 and 261. If the 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.</p>
<p>If the fault persists, contact your Techline.</p>

AFTER REPAIR	<p>Carry out another fault finding check on the system. Clear the stored faults using command RZ003 Fault memory. Deal with any other faults.</p>
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Fault finding – Interpretation of faults

DF040 DF043 PRESENT OR STORED	<u>NO AUDIO CD CHANGER SIGNALS</u> 1.DEF: No communication with the CD changer
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NOTES	Use the Wiring Diagrams Technical Note for Clio III or New Twingo .
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Check for a CD changer in the vehicle.
Check the consistency between the configuration of the radio and the vehicle equipment by reading configuration LC005 External components and correct if necessary, using SC002 Computer configuration .
Look for any signs of damage to the wiring harness, check the condition and connection of the connectors and connections of components 261 and the CD changer . If the connectors or connections are faulty and if there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the connector or the wiring, otherwise replace the wiring.
If the vehicle is equipped with a CD changer, it was fitted as an accessory. Please refer to the handbook delivered with the product.
If the checks are correct, replace the CD changer.
If the fault persists, contact your Techline.

AFTER REPAIR	Carry out another fault finding check on the system. Clear the stored faults using command RZ003 Fault memory . Deal with any other faults.
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Fault finding – Interpretation of faults

DF046 PRESENT OR STORED	<u>UNIT LOCKED</u> 1.DEF: System locked
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NOTES	This fault is detected when the radio computer receives a radio programming key (supplied from the VIN) that is invalid for the instrument panel via the multiplex network.
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Use the diagnostic tool to check that the V.I.N. of the radio is identical to that of the instrument panel.
Configure the multimedia connection unit (see 86D, Multimedia connection unit, Configuration).
Enter the radio code (see Anti-theft code).
If the fault persists, contact your Techline.

AFTER REPAIR	Carry out another fault finding check on the system. Clear the stored faults using command RZ003 Fault memory . Deal with any other faults.
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Fault finding – Interpretation of faults

DF055 PRESENT OR STORED	<u>BUTTON JAMMED</u> 1.DEF: Radio front panel button jammed.
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NOTES	Conditions for applying fault finding procedures to stored faults: The fault is declared present after: – The + after ignition feed is activated, – The multimedia system is switched on using the on/off button. The button concerned is pressed for at least 2 minutes ,
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Check the conformity of the radio buttons by consulting the following statuses: <ul style="list-style-type: none"> – ET005 Source button, – ET007 Info traffic button, – ET008 Radio on/off button, – ET009 CD eject button, – ET010 Radio preset button 1, – ET011 Radio preset button 2, – ET012 Radio preset button 3, – ET013 Radio preset button 4, – ET014 Radio preset button 5, – ET015 Radio preset button 6, – ET063 MEM button, – ET068 Volume - button, – ET069 Volume + button, – ET070 OK button, – ET071 Up button, – ET072 Down button, – ET073 Left-hand button, – ET074 Right-hand button, If the one of the statuses is Pressed , press on the corresponding button so that the status becomes Released .	
If the fault is still present, replace the radio (see MR 392 (Clio III) or MR 411 (New Twingo) Mechanical, 86A, Radio, Radio: Removal - Refitting).	

AFTER REPAIR	Carry out another fault finding check on the system. Clear the stored faults using command RZ003 Fault memory . Deal with any other faults.
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Fault finding – Interpretation of faults

DF057 PRESENT OR STORED	<u>DISC ERROR</u> 1.DEF: Internal electronic fault
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NOTES	This fault appears when there is a CD in the player.
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Check disc operation in another CD player. Check that the system operates normally.
If the fault persists, contact your Techline.

AFTER REPAIR	Carry out another fault finding check on the system. Clear the stored faults using command RZ003 Fault memory . Deal with any other faults.
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Fault finding – Interpretation of faults

DF058 PRESENT OR STORED	<u>CD CHANGER OVERHEATING</u> 1.DEF: Operating temperature too high
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NOTES	None.
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Switch off the system in order to lower the temperature. Wait for the system to cool, then check that the system operates normally. Explain the fault to the customer.
If the fault persists, contact your Techline.

AFTER REPAIR	Carry out another fault finding check on the system. Clear the stored faults using command RZ003 Fault memory . Deal with any other faults.
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Fault finding – Interpretation of faults

DF064 PRESENT OR STORED	<u>ACTIVATION SIGNAL</u> CC.0: Short circuit to earth CC.1: Short circuit to + 12 V CO: Open circuit
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NOTES	Conditions for applying fault finding procedures to stored faults: The fault is declared present after: – the + after ignition feed is activated, – the multimedia system has been switched on using the on/off button.
	Use the Wiring Diagrams Technical Note for Clio III or New Twingo .
	For a vehicle equipped with a navigation system, use the multimedia connection unit computer, component code 1714 , for fault finding. For a vehicle without a navigation system, use the display computer, component code 653 , for fault finding.

Check the condition of the connector on the radio, component code **261**, and, depending on the equipment level, on the display, component code **653**, or on the multimedia connection unit, component code **1714**.

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

- **34HY** between components **261** and **653** or **1714**,

If the connection(s) are faulty and there is a repair method (see **Technical Note 6015A, Repairing electrical wiring, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.

If the connection is correct, replace the radio (see **MR 392 (Clio III) or MR 411 (New Twingo) Mechanical, 86A, Radio, Radio: 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 RZ003 Fault memory , after pressing the ON/OFF button. Deal with any other faults.
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Fault finding – Interpretation of faults

DF080 PRESENT OR STORED	<u>EXCESSIVE TEMPERATURE</u> 1.DEF: Operating temperature too high
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NOTES	None.
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When the internal temperature of the system is too high, the system will take actions to decrease this temperature: lowering the volume, deactivating CD insertion, etc.

Explain the fault to the customer.

If the fault persists, contact your Techline.

AFTER REPAIR	Carry out another fault finding check on the system. Clear the stored faults using command RZ003 Fault memory . Deal with any other faults.
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Fault finding – Interpretation of faults

DF081 PRESENT OR STORED	<u>CD CHANGER BUTTON JAMMED</u> 1. DEF: CD changer button jammed
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NOTES	None.
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Check the operation and condition of the CD changer button, using status **ET009 CD eject button** (see **Conformity check**).

AFTER REPAIR	Carry out another fault finding check on the system. Clear the stored faults using command RZ003 Fault memory . Deal with any other faults.
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Fault finding – Conformity check

NOTES

Only carry out this 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
Supply	PR011: Battery voltage	12 V < X < 15 V	In the event of an inconsistency, consult the interpretation of fault DF039 Battery voltage .

Fault finding – Conformity check

NOTES

Only carry out this 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
Front panel button	ET010: Radio preset button 1	PRESSED RELEASED	In the event of an inconsistency, consult the interpretation of fault DF055 Button jammed .
	ET011: Radio preset button 2	PRESSED RELEASED	
	ET012: Radio preset button 3	PRESSED RELEASED	
	ET013: Radio preset button 4	PRESSED RELEASED	
	ET014: Radio preset button 5	PRESSED RELEASED	
	ET015: Radio preset button 6	PRESSED RELEASED	
	ET008: Radio on/off button	PRESSED RELEASED	
	ET009: CD eject button	PRESSED RELEASED	

Fault finding – Conformity check

NOTES

Only carry out this 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 (continued)

Function	Parameter or status checked or action	Display and notes	Fault finding
Front panel button (continued)	ET071: Up button	PRESSED RELEASED	In the event of an inconsistency, consult the interpretation of fault DF055 Button jammed.
	ET072: Down button	PRESSED RELEASED	
	ET070: "OK" button	PRESSED RELEASED	
	ET069: Volume "-" button	PRESSED RELEASED	
	ET068: Volume "+" button	PRESSED RELEASED	

Fault finding – Conformity check

NOTES

Only carry out this 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 (continued)

Function	Parameter or status checked or action	Display and notes	Fault finding
Front panel button (continued)	ET063: "MEM" button	PRESSED RELEASED	In the event of an inconsistency, consult the interpretation of fault DF055 Button jammed.
	ET005: Source button	PRESSED RELEASED	
	ET007: Traffic info button	PRESSED RELEASED	
	ET073: Left-hand button	PRESSED RELEASED	
	ET074: Right-hand button	PRESSED RELEASED	
CD ejection	AC013: CD ejection	This command is used for testing CD ejection from the CD player.	In the event of an inconsistency, contact the Techline.
Supply	PR011: Battery voltage	12 V < X < 15 V	In the event of an inconsistency, consult the interpretation of fault DF039 Battery voltage.
Computer activation	ET065: Activation request	ACTIVE INACTIVE	In the event of an inconsistency, consult the interpretation of fault DF064 Activation signal.
	ET057: Activation signal	ACTIVE INACTIVE	

Fault finding – Conformity check

NOTES

Only carry out this 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: AUDIO

Function	Parameter or status checked or action	Display and notes	Fault finding
Audio test	AC004: Test right front speaker line	This command is used to successively activate each speaker.	In the event of an inconsistency, consult the interpretation of fault DF001 Front right-hand speaker.
	AC005: Test left front speaker line		In the event of an inconsistency, consult the interpretation of fault DF002 Front left-hand speaker.
	AC006: Test right rear speaker line		In the event of an inconsistency, consult the interpretation of fault DF003 Rear right-hand speaker.
	AC007: Test left rear speaker line		In the event of an inconsistency, consult the interpretation of fault DF004 Rear left-hand speaker.

Fault finding – Conformity check

NOTES

Only carry out this 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

FUNCTION: WIRELESS COMMUNICATIONS

Function	Parameter or status checked or action	Display and notes	Fault finding
Radio reception	PR005: Radio field intensity	0 dBµV <X <128 dBµV	In the event of an inconsistency, consult the interpretation of parameter PR005 .

Fault finding – Status summary table

Tool status	Diagnostic tool title
ET005	Source button
ET007	Traffic info button
ET008	Radio on/off button
ET009	CD eject button
ET010	Radio preset button 1
ET011	Radio preset button 2
ET012	Radio preset button 3
ET013	Radio preset button 4
ET014	Radio preset button 5
ET015	Radio preset button 6
ET057	Activation signal
ET063	"MEM" button
ET065	Activation request
ET068	Volume "-" button
ET069	Volume "+" button
ET070	"OK" button
ET071	Up button
ET072	Down button
ET073	Left-hand button
ET074	Right-hand button

Fault finding – Parameter summary table

Tool Parameter	Diagnostic tool title
PR005	Radio field intensity
PR011	Battery voltage

Fault finding – Interpretation of parameters

PR005	<u>RADIO FIELD INTENSITY</u>
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NOTES	<p>The values shown in this conformity check are given as a guide. Test conditions: Engine off, ignition on and radio on. Perform the conformity check outside, in an area with good radio reception and without obstacles.</p>
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Conformity check:
 Monitor the **PR005** value of the **diagnostic tool** data display.

Display of frequency received for the radio station currently set.

Radio field intensity parameter	Radio reception level (data display)
Outdoor test	Unit: dBµV

Data interpretation:

Radio reception value	Status
X > 18 dBµV	Correct radio reception
14 dBµV < X < 18 dBµV	Correct sound quality RDS decoding (for example: display of station names) correct Automatic synchronisation / Presence in the radio list not satisfactory
10 dBµV < X < 14 dBµV	Correct sound quality RDS decoding (for example: display of station names) not satisfactory Automatic synchronisation / Presence in the radio list not satisfactory
X > 10 dBµV	Radio reception not satisfactory

If the fault is still present, contact the Techline.

AFTER REPAIR	Repeat the conformity check from the start.
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Fault finding – Command summary table

Tool command	Diagnostic tool title	Description
RZ003:	Fault memory	This command is used for clearing the stored faults from the computer.
AC004:	Test right front speaker line	These commands are used to carry out a listening test for each speaker.
AC005:	Front left-hand speaker lines test	
AC006:	Rear right-hand speaker lines test	
AC007:	Test left rear speaker line	
AC013:	CD ejection	
SC002:	Computer configuration	This command is used for testing CD ejection from the CD player. Set the radio to CD mode and run command AC013 . See Configuration and Programming .

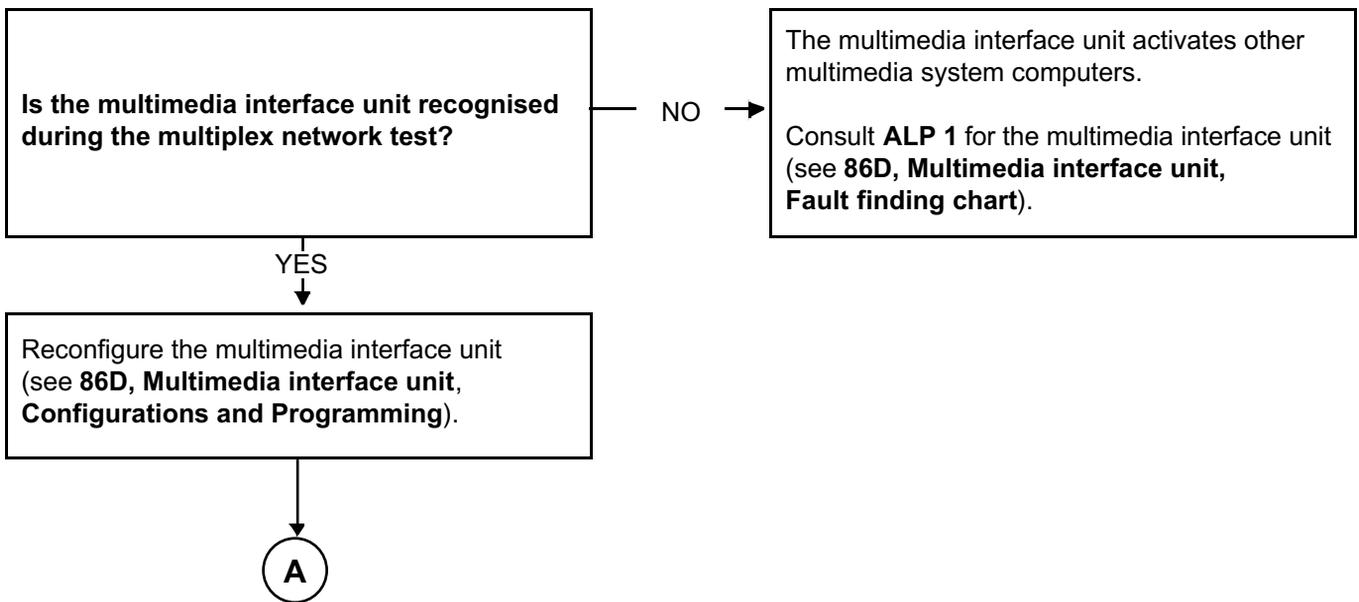
NOTES	Only refer to the customer complaints after performing a complete check using the diagnostic tool.
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NO DIALOGUE WITH THE COMPUTER	ALP1
THE RADIO BEEPS EVERY 2 SECONDS	ALP2
THE RADIO DOES NOT OPERATE WHEN THE ON BUTTON IS PRESSED	ALP3
RADIO IS SWITCHED ON, BUT THE DISPLAY DOES NOT WORK	ALP4
THE RADIO CONTROL SATELLITE DOES NOT OPERATE OR OPERATES POORLY	ALP5
RADIO RECEPTION FAULT	ALP6
THE VOLUME DOES NOT INCREASE WITH THE VEHICLE SPEED.	ALP7
BACKLIGHTING DOES NOT CHANGE WHEN THE VEHICLE LIGHTS ARE SWITCHED ON	ALP8
THE RADIO DOES NOT PLAY THE CD IN ORDER OR SKIPS SONGS	ALP9
SOUND FAULT FOR A SPEAKER OR TWEETER (REGARDLESS OF SOURCE)	ALP10
THE RADIO AND/OR THE DISPLAY REMAINS LIT FOR 1 MINUTE AFTER LOCKING THE VEHICLE (ON NEW TWINGO ONLY)	ALP11
THE CD DOES NOT EJECT	ALP12
A RADIO BUTTON(S) NO LONGER OPERATES OR FUNCTIONS POORLY	ALP 13
POOR SOUND (REGARDLESS OF THE SOURCE)	ALP14
FAULT WHEN USING THE MOBILE CONNECTIVITY TERMINAL	ALP15

Fault finding – Fault Finding Chart

ALP 1	No dialogue with the computer
--------------	--------------------------------------

NOTES	<p>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).</p>
	<p>Ensure that the communication conditions are met: + After ignition feed activated and radio On/Off button pressed.</p>
	<p>Use the Wiring Diagrams Technical Note for Clio III or New Twingo.</p>
	<p>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.</p>



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

Fault finding – Fault Finding Chart

ALP 1 CONTINUED 1	
------------------------------	--



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

Fault finding – Fault Finding Chart

**ALP 1
CONTINUED 2**

C

YES

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

- **34HU** between components **261** and **1714**.

Are the checks correct?

NO →

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

YES

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

- **34GC** between components **662** and **261**,
- **34GB** between components **662** and **261**.

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

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

- **34GC** and **107X** between components **261** and **1714**,
- **34GB** and **107W** between components **261** and **1714**.

Are the checks correct?

NO →

Replace the navigation computer, component code **662** (see **MR 392, Mechanical, 83C, On-board telematics system, Navigation computer: Removal – Refitting**).

YES

Replace the radio, component code **261** (see **MR 392, Mechanical, 86A, Radio, Radio: Removal - Refitting**).

AFTER REPAIR

When communication is established, deal with any faults indicated.

Fault finding – Fault Finding Chart

<p>ALP 1 CONTINUED 3</p>	
-------------------------------------	--

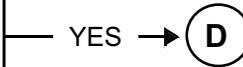


Check the **condition** and **connection** of the radio computer connector, component code **261**.
If the connector is faulty and there is a repair method (see **Technical Note 6015A, Repairing electrical wiring, Wiring: Precautions for repair**), repair the connector, otherwise replace the wiring.

Disconnect the radio computer connector, component code **261**.
Check for **+ 12 V** and **earth** on the radio between the following connections:

- **BCP4** of component **261** and the **MAO (New Twingo)** or **MT (Clio III)** earth.

Are the checks correct?



Check for **+ 12 V** on the radio computer between the following connections:

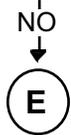
- **BCP4** of component **261** and **earth**.

Is the result of the check correct?



Check the **continuity, insulation and absence of interference resistance** of connection **MAO (New Twingo)** or **MT (Clio III)** between the radio computer, component code **261** and the **earth**.

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



<p>AFTER REPAIR</p>	<p>When communication is established, deal with any faults indicated.</p>
----------------------------	---

Fault finding – Fault Finding Chart

**ALP 1
CONTINUED 4**



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

- **BCP4** between components **261** and **710**,
- **BP69** between components **260** and **710** (only for **Clio III**).

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

When communication is established, deal with any faults indicated.

Fault finding – Fault Finding Chart

ALP 1 CONTINUED 5	
------------------------------	--

D

YES

Check the **ET002 Radio on/off button** of the display or multimedia connection unit while pressing the on/off button (see **86D, Multimedia connection unit, Conformity check**).

Is the result of the check correct?

YES →

F

NO

Check the **ET008 Radio on/off button** (see **Conformity check**)

Is the result of the check correct?

NO →

Replace the radio, component code **261** (see **MR 392 (Clio III) or MR 411 (New Twingo) Mechanical, 86A, Radio, Radio: Removal - Refitting**).

YES

G

AFTER REPAIR

When communication is established, deal with any faults indicated.

Fault finding – Fault Finding Chart

ALP 1 CONTINUED 6	
------------------------------	--

G

YES

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

- **34HY** between components **261** and **653** or **1714**.

Is the result of the check correct?

NO

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

YES

Replace the display, component code **653** (see **MR 392 (Clio III)** or **MR 411 (New Twingo) Mechanical, 86A, Radio, Display: Removal – Refitting**) or the multimedia connection unit, component code **1714** or (see **MR 392 (Clio III) Mechanical, 83C, On-board telematics system, Multimedia network interface unit: Removal – Refitting**).

AFTER REPAIR

When communication is established, deal with any faults indicated.

Fault finding – Fault Finding Chart

**ALP 1
CONTINUED 7**

F

YES

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

- **34HU** between components **261** and **653**.

Is the result of the check correct?

NO

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

YES

Is a navigation computer present in the vehicle?

NO

I

YES

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

- **107X** between components **662** and **1714**,
- **107W** between components **662** and **1714**.

Is the result of the check 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

H

AFTER REPAIR

When communication is established, deal with any faults indicated.

Fault finding – Fault Finding Chart

**ALP 1
CONTINUED 8**



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

- **34GC** between components **662** and **261**,
- **34GB** between components **662** and **261**.

Is the result of the check 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.



AFTER REPAIR

When communication is established, deal with any faults indicated.

Fault finding – Fault Finding Chart

**ALP 1
CONTINUED 9**

J

YES

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

- **34GC** and **107X** between components **261** and **1714**,
- **34GB** and **107W** between components **261** and **1714**.

Are the checks correct?

NO →

Replace the navigation computer, component code **662** (see **MR 392 (Clio III) Mechanical, 83C, On-board telematics system, Navigation computer: Removal – Refitting**).

YES

Replace the radio, component code **261** (see **MR 392, Mechanical, 86A, Radio, Radio: Removal - Refitting**).

Is the fault still present?

NO →

The problem disappears.

YES

Replace the multimedia connection unit, component code **1714** (see **MR 392, Mechanical, 83C, On-board telematics system, Multimedia network interface unit: Removal - Refitting**).

AFTER REPAIR

When communication is established, deal with any faults indicated.

Fault finding – Fault Finding Chart

ALP 1 CONTINUED 10	
-------------------------------	--



NO

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

- **107X** of component **261**,
- **107W** of component **261**.

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

Replace the radio, component code **261** (see **MR 392 (Clio III) or MR 411 (New Twingo) Mechanical, 86A, Radio, Radio: Removal - Refitting**).

Is the fault still present?

NO →

The problem disappears.

YES

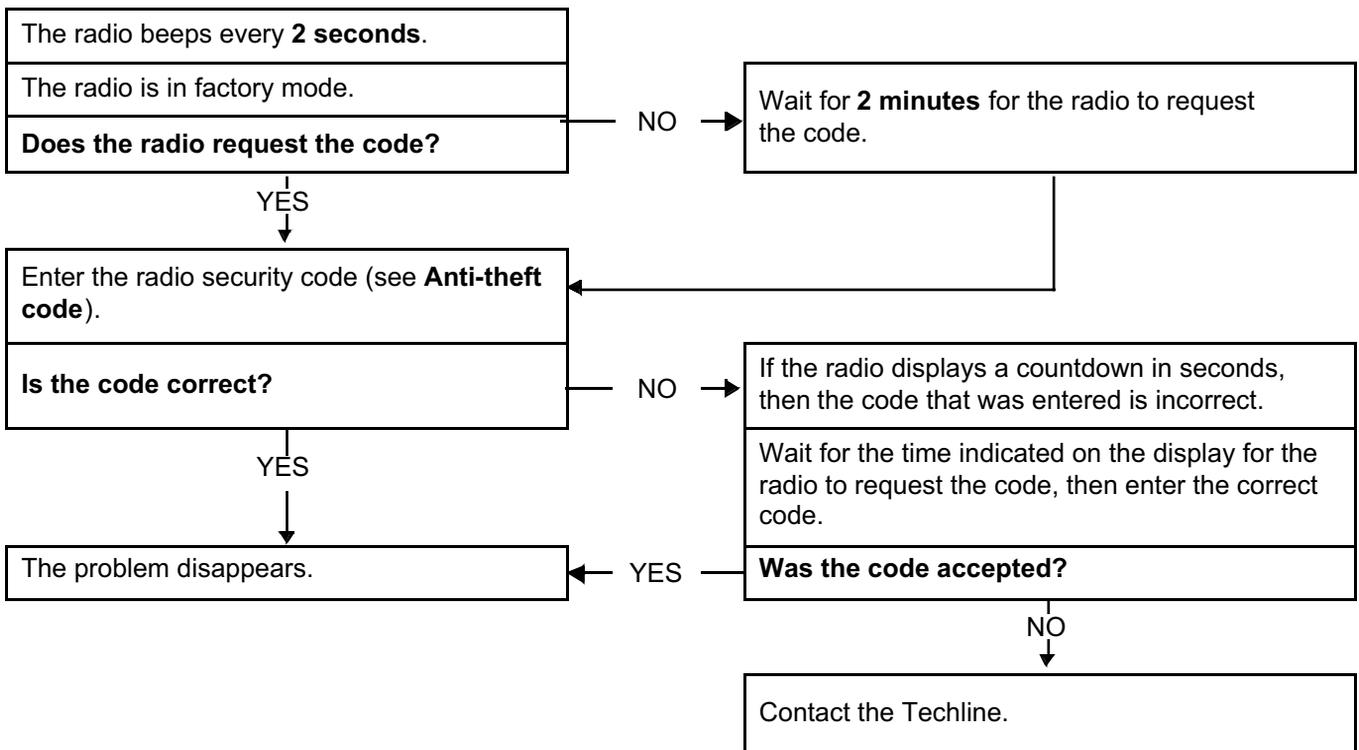
Replace the display, component code **653** (see **MR 392 (Clio III) or MR 411 (New Twingo) Mechanical, 86A, Radio, Display: Removal – Refitting**).

AFTER REPAIR

When communication is established, deal with any faults indicated.

ALP 2	The radio beeps every 2 seconds
--------------	--

NOTES	Use the Wiring Diagrams Technical Note for Clio III or New Twingo .
--------------	--

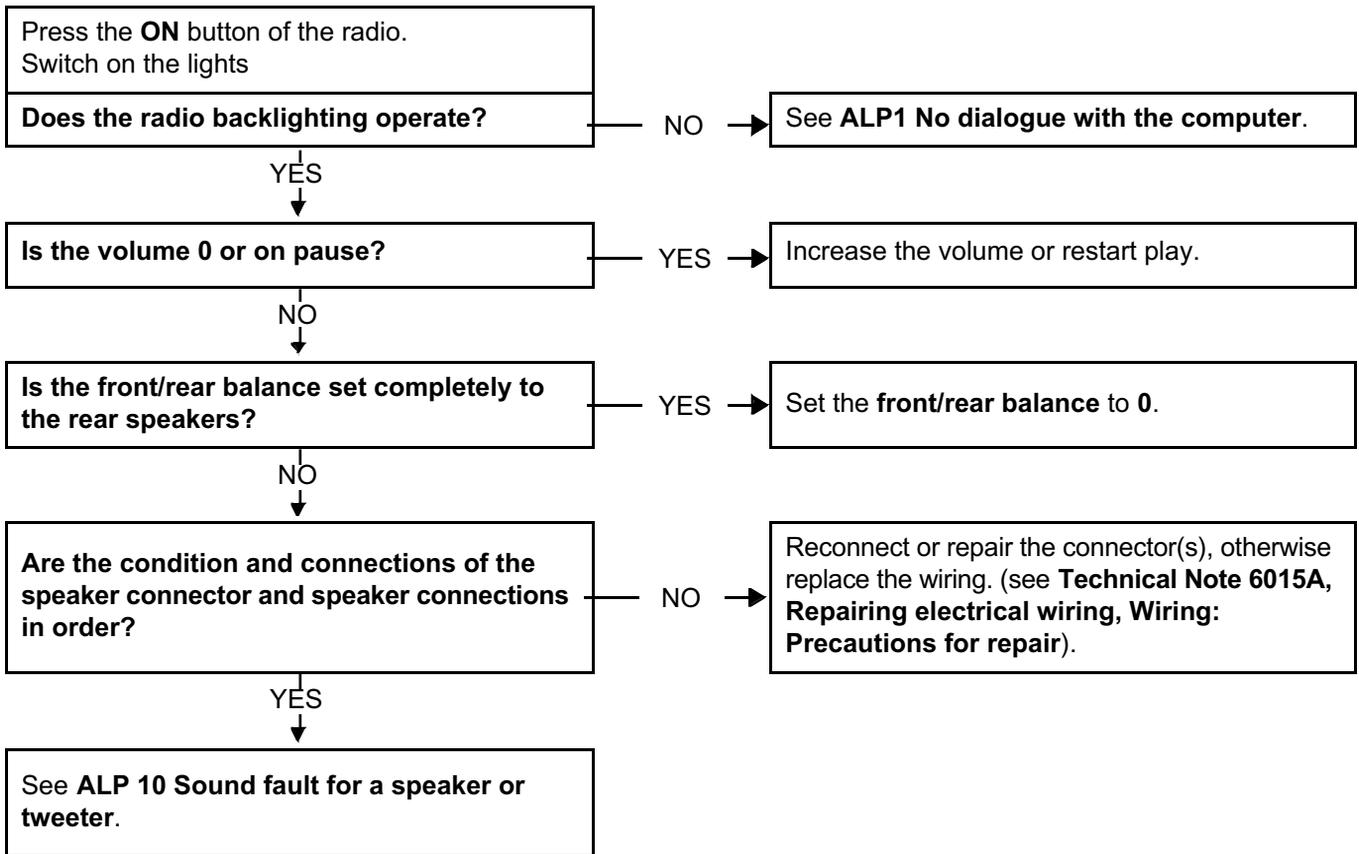


AFTER REPAIR	Carry out another fault finding check on the system. Deal with any faults.
---------------------	---

Fault finding – Fault Finding Chart

ALP 3	The radio does not operate when the ON button is pressed
--------------	---

NOTES	None.
--------------	-------



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

Fault finding – Fault Finding Chart

ALP 4	Radio is switched on, but the display does not work.
--------------	---

NOTES	None.
--------------	-------

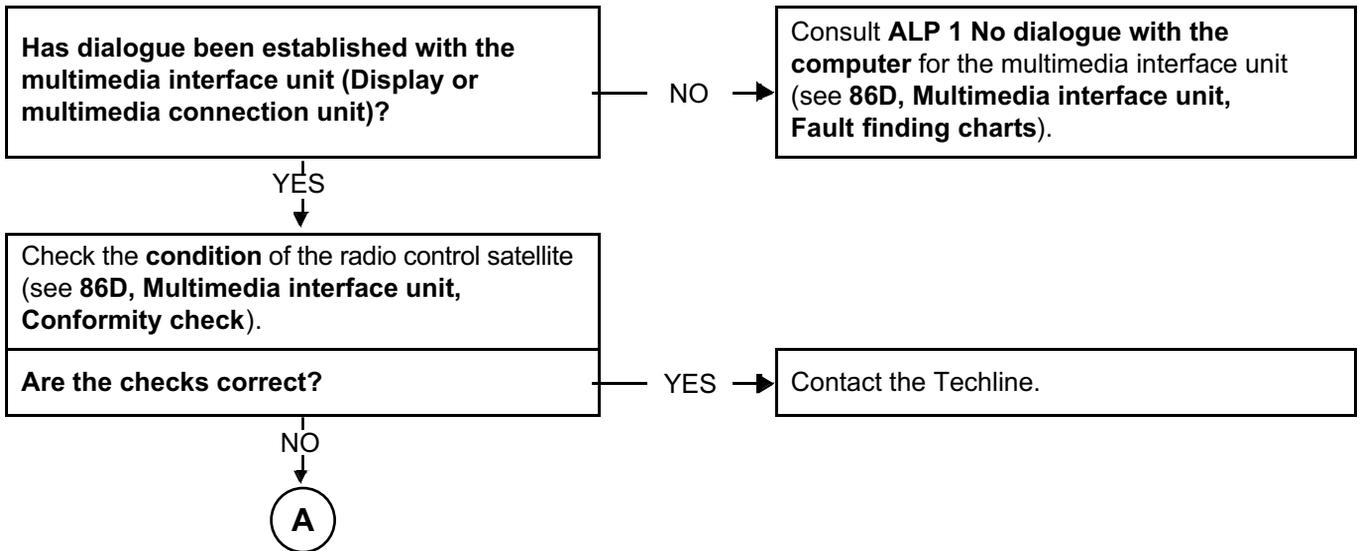
Consult **ALP 1 No dialogue with the computer** for the multimedia interface unit (see **86D, Multimedia interface unit, Fault finding charts**).

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

Fault finding – Fault Finding Chart

ALP 5	The radio control satellite does not operate or operates poorly
--------------	--

NOTES	Use the Wiring Diagrams Technical Note for Clio III or New Twingo .
--------------	--



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

Fault finding – Fault Finding Chart

**ALP 5
CONTINUED 1**



Check the **condition** and **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 **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?



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 Techline.

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

Fault finding – Fault Finding Chart

**ALP 5
CONTINUED 2**

B
YES
↓

New Twingo:

Replace the radio control satellite, component code **325** (see **MR 392, 86A, Radio, Radio control satellite: Removal - Refitting**).

Clio III:

Replace the radio control satellite, component code **1519** (see **MR 411, 86A, Radio, Radio control satellite: Removal - Refitting**).

↓
If the fault is still present, contact Techline

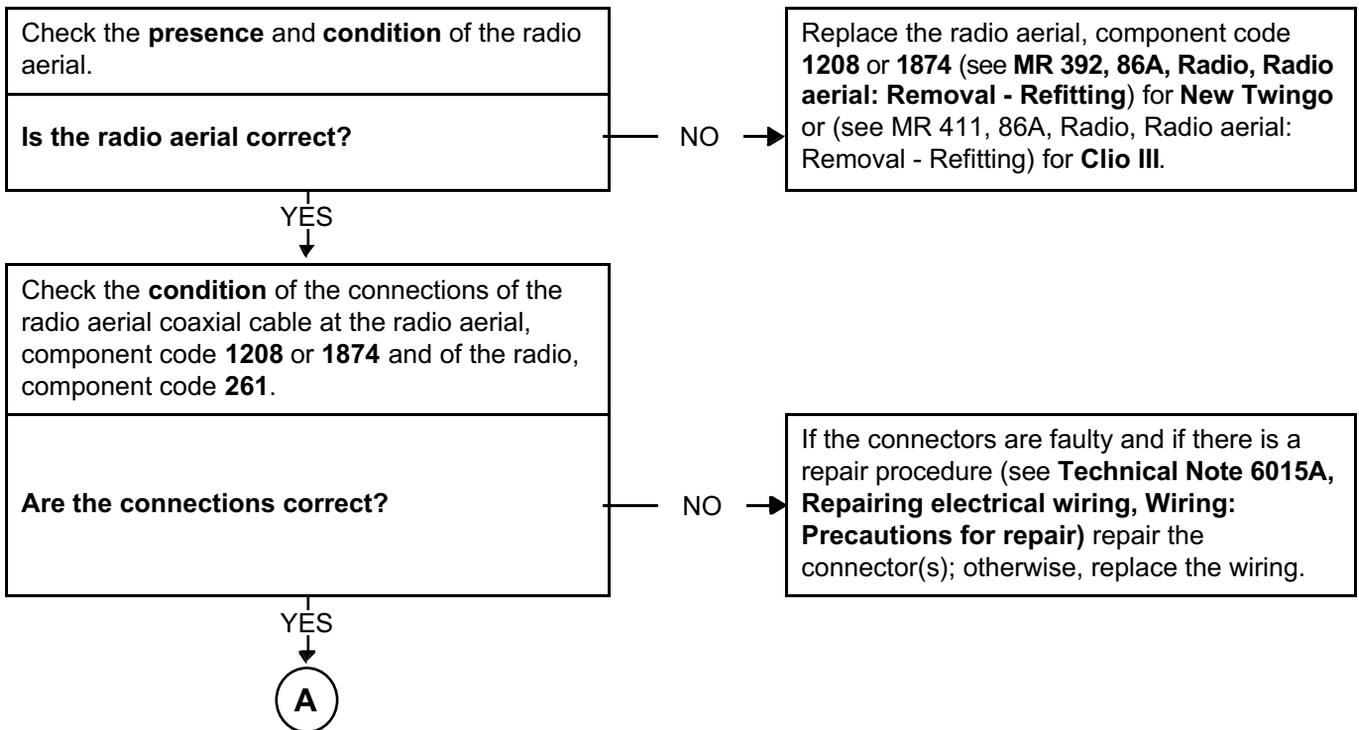
AFTER REPAIR

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

Fault finding – Fault Finding Chart

ALP 6	Radio reception fault.
--------------	-------------------------------

NOTES	For the aerial, use component code 1874 for a vehicle equipped with a navigation system, and 1208 for a vehicle without this option. See Clio III or New Twingo wiring diagrams.
	See Clio III or New Twingo wiring diagrams.



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

Fault finding – Fault Finding Chart

ALP 6 CONTINUED	
----------------------------	--

A

YES

Display **PR005 Radio field intensity**, then disconnect the radio aerial and display **PR005** again.

Was the radio reception different during either of these 2 tests?

YES →

Contact the Techline.

NO

Replace the radio aerial, component code **1208** or **1874** (see **MR 392 (Clio III)** or **MR 411 (New Twingo)**, **Mechanical, 86A, Radio, Radio aerial: Removal - Refitting**).

If the fault is still present, replace the radio, component code **261** (see **MR 392 (Clio III)** or **MR 411 (New Twingo)** **Mechanical, 86A, Radio, Radio: Removal - Refitting**).

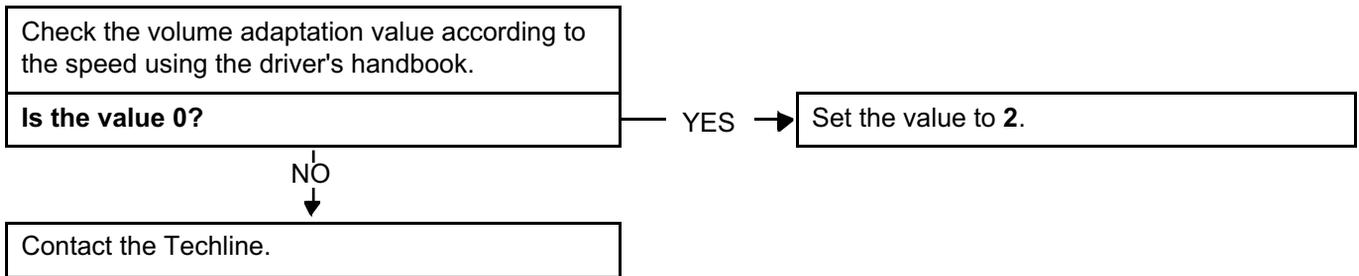
AFTER REPAIR

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

Fault finding – Fault Finding Chart

ALP 7	The volume does not increase with the vehicle speed.
--------------	---

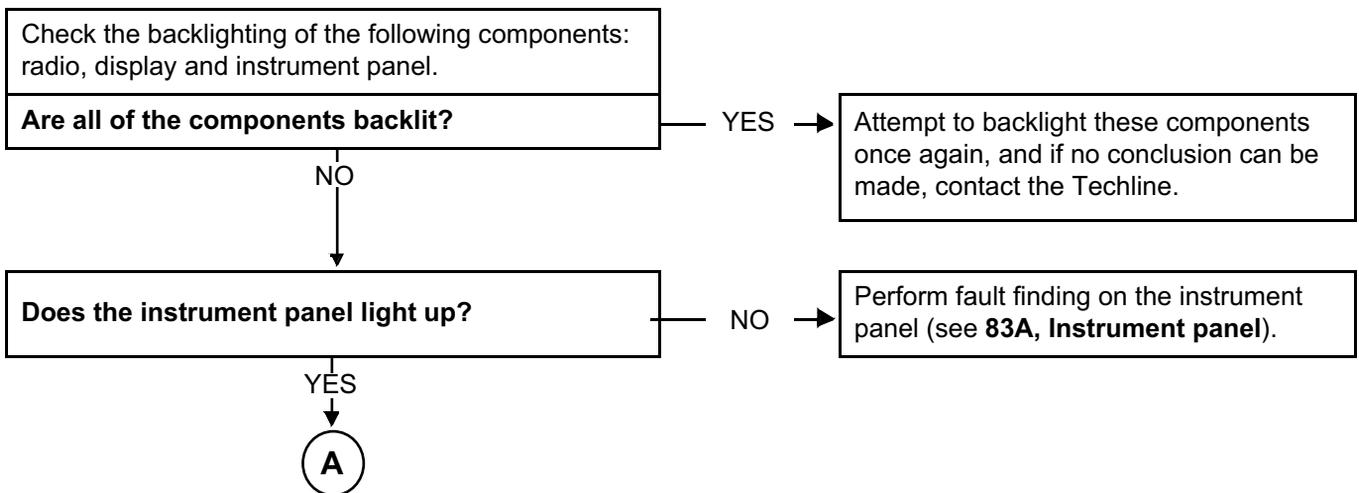
NOTES	Consult the user manual to make the adjustments.
--------------	--



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

ALP 8	Backlighting does not change when the vehicle lights are switched on
--------------	---

NOTES	Use the Wiring Diagrams Technical Note for Clio III or New Twingo .
	NOTE: Switch on the side lights and position the lighting rheostat wheel in the centre position.
	The display, component code 653 , is only available when the vehicle does not have the navigation function. The multimedia connection unit, component code 1714 , is only available when the vehicle has the navigation function.



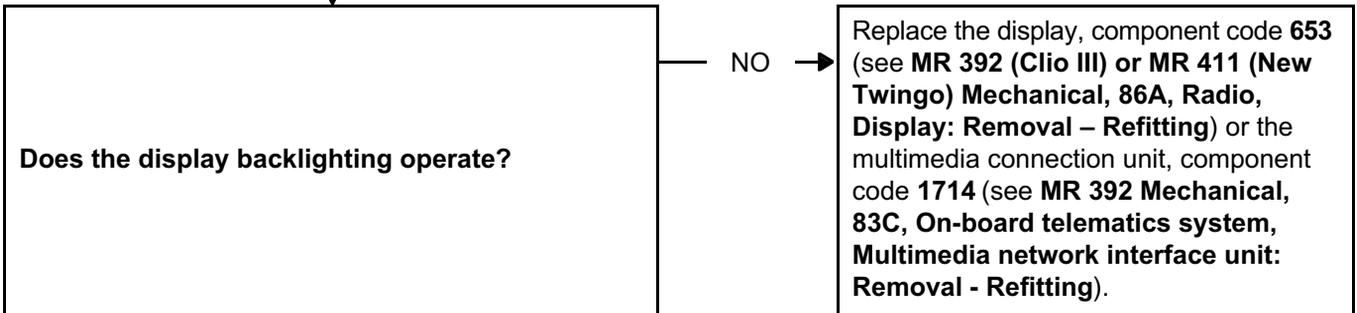
AFTER REPAIR	Carry out another fault finding check on the system. Deal with any faults.
---------------------	---

Fault finding – Fault Finding Chart

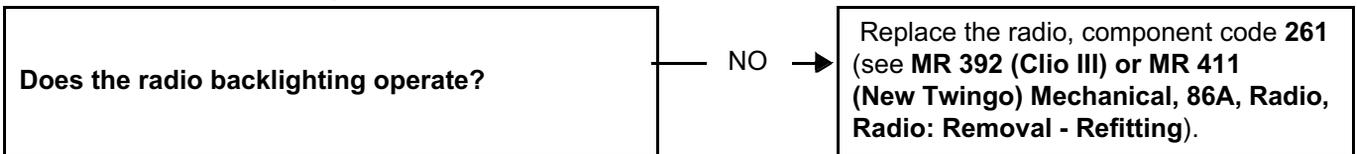
ALP 8 CONTINUED	
----------------------------	--

A

YES
↓



YES
↓



YES
↓

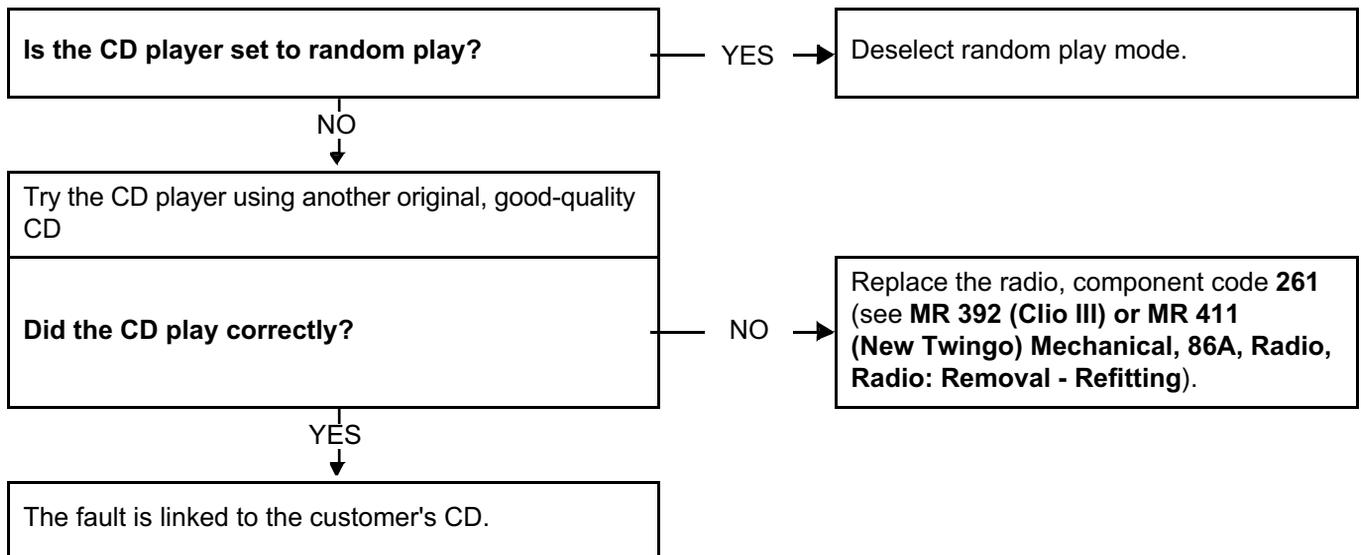
Contact the Techline.

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

Fault finding – Fault Finding Chart

ALP 9	The radio does not play the CD in order or skips songs
--------------	---

NOTES	Use the Wiring Diagrams Technical Note for Clio III or New Twingo .
--------------	--

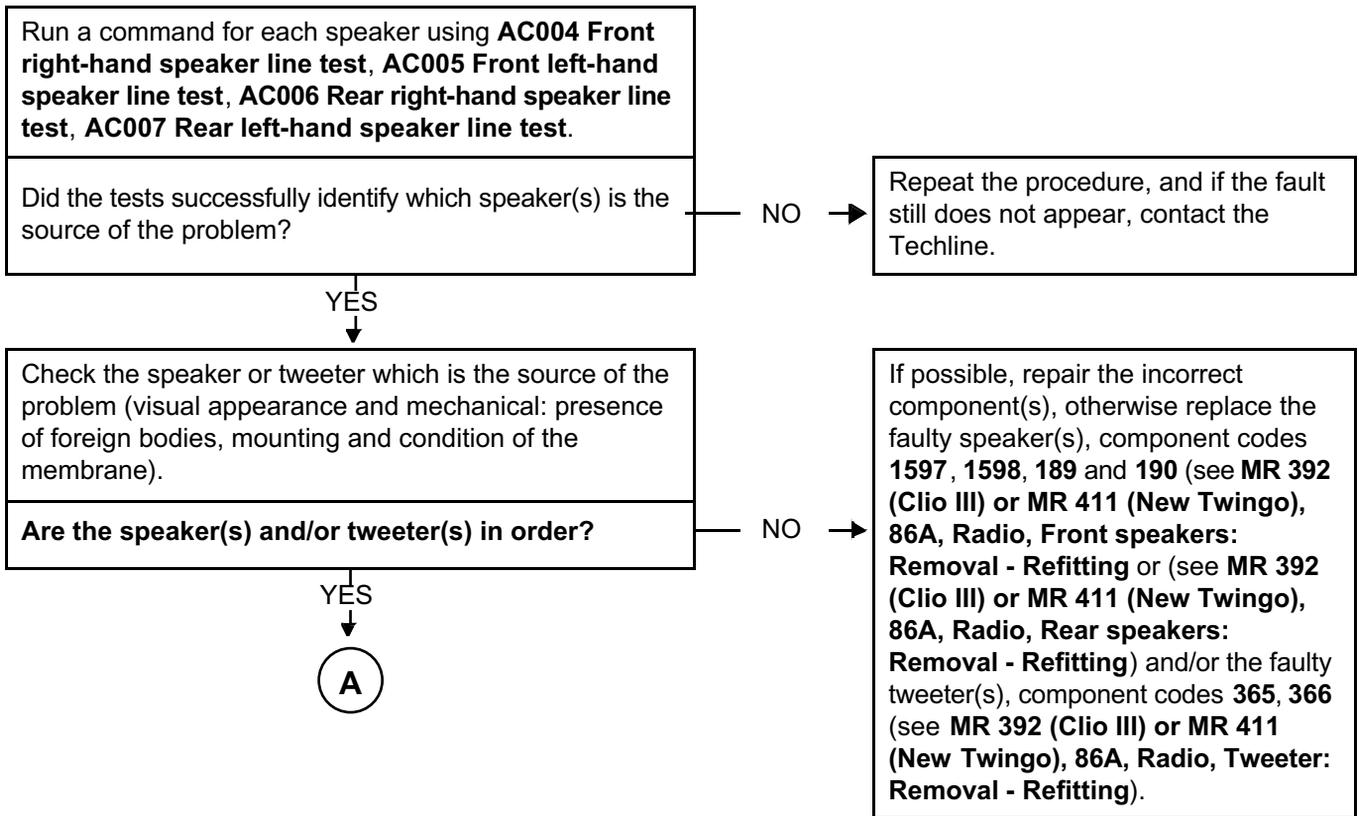


AFTER REPAIR	Carry out another fault finding check on the system. Deal with any faults.
---------------------	---

Fault finding – Fault Finding Chart

ALP 10	Sound fault for a speaker or tweeter (regardless of source).
---------------	---

NOTES	Use the Wiring Diagrams Technical Note for Clio III or New Twingo .
--------------	--



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

Fault finding – Fault Finding Chart

ALP 10 CONTINUED	
-----------------------------	--

A

YES
↓

Check the continuity, insulation and absence of interference resistance of the connections or component(s) in question:

- **34A** between components **261** and **190**,
- **34B** between components **261** and **190**,
- **34C** between components **261** and **189**,
- **34D** between components **261** and **189**,
- **34E** between components **261**, **365** and **1598** (left-hand drive) or **1597** (right-hand drive),
- **34F** between components **261**, **365** and **1598** (left-hand drive) or **1597** (right-hand drive),
- **34G** between components **261**, **366** and **1598** (right-hand drive) or **1597** (left-hand drive),
- **34H** between components **261**, **366** and **1598** (right-hand drive) or **1597** (left-hand drive).

Are the checks correct?

YES →

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.

Contact the Techline.

Replace the faulty speaker(s), component codes **1597**, **1598**, **189** and **190** (see **MR 392 (Clio III)** or **MR 411 (New Twingo)**, **86A, Radio, Front speakers: Removal - Refitting** or see **MR 392 (Clio III)** or **MR 411 (New Twingo)**, **86A, Radio, Rear speakers: Removal - Refitting**) and / or the faulty tweeter(s), component codes **365**, **366** (see **MR 392 (Clio III)** or **MR 411 (New Twingo)**, **86A, Radio, Tweeter: Removal - Refitting**).

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

ALP 11	The radio and/or the display remains lit for 1 minute after locking the vehicle (on New Twingo only)
---------------	---

NOTES	None.
--------------	-------

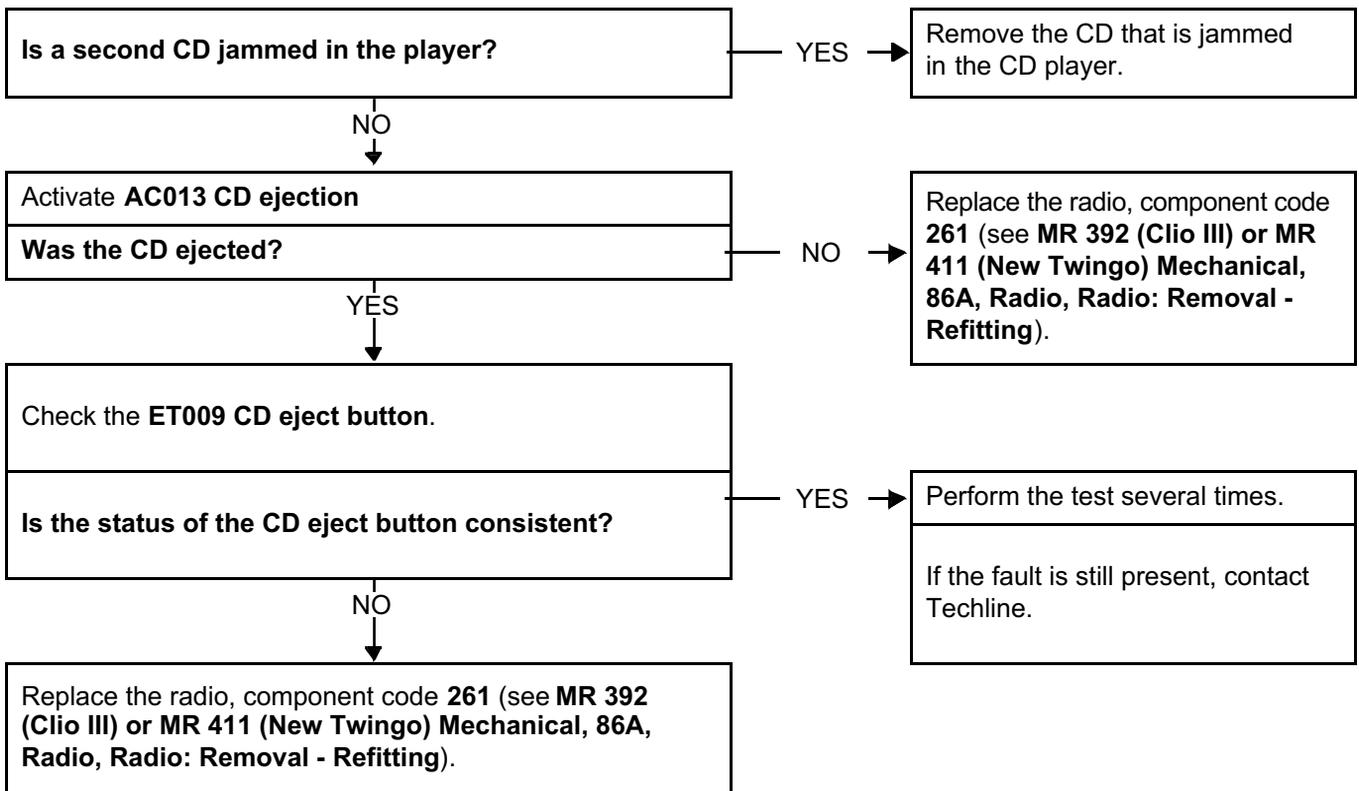
Explain to the customer that this operation is normal on **New Twingo**.

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

Fault finding – Fault Finding Chart

ALP 12	The CD does not eject.
---------------	-------------------------------

NOTES	Use the Wiring Diagrams Technical Note for Clio III or New Twingo .
--------------	--

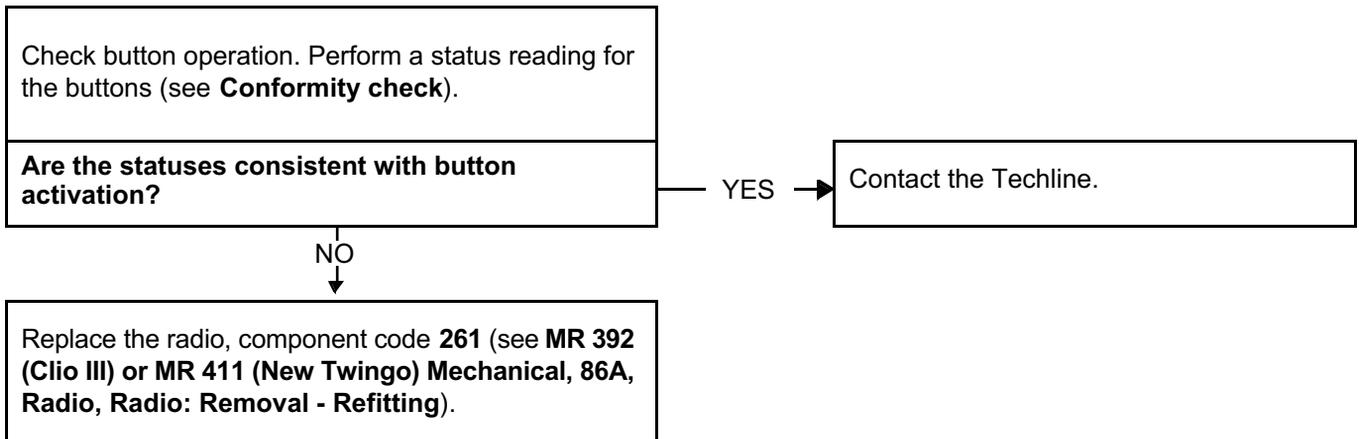


AFTER REPAIR	Carry out another fault finding check on the system. Deal with any faults.
---------------------	---

Fault finding – Fault Finding Chart

ALP 13	A radio button(s) no longer operates or functions poorly.
---------------	--

NOTES	Use the Wiring Diagrams Technical Note for Clio III or New Twingo .
--------------	--

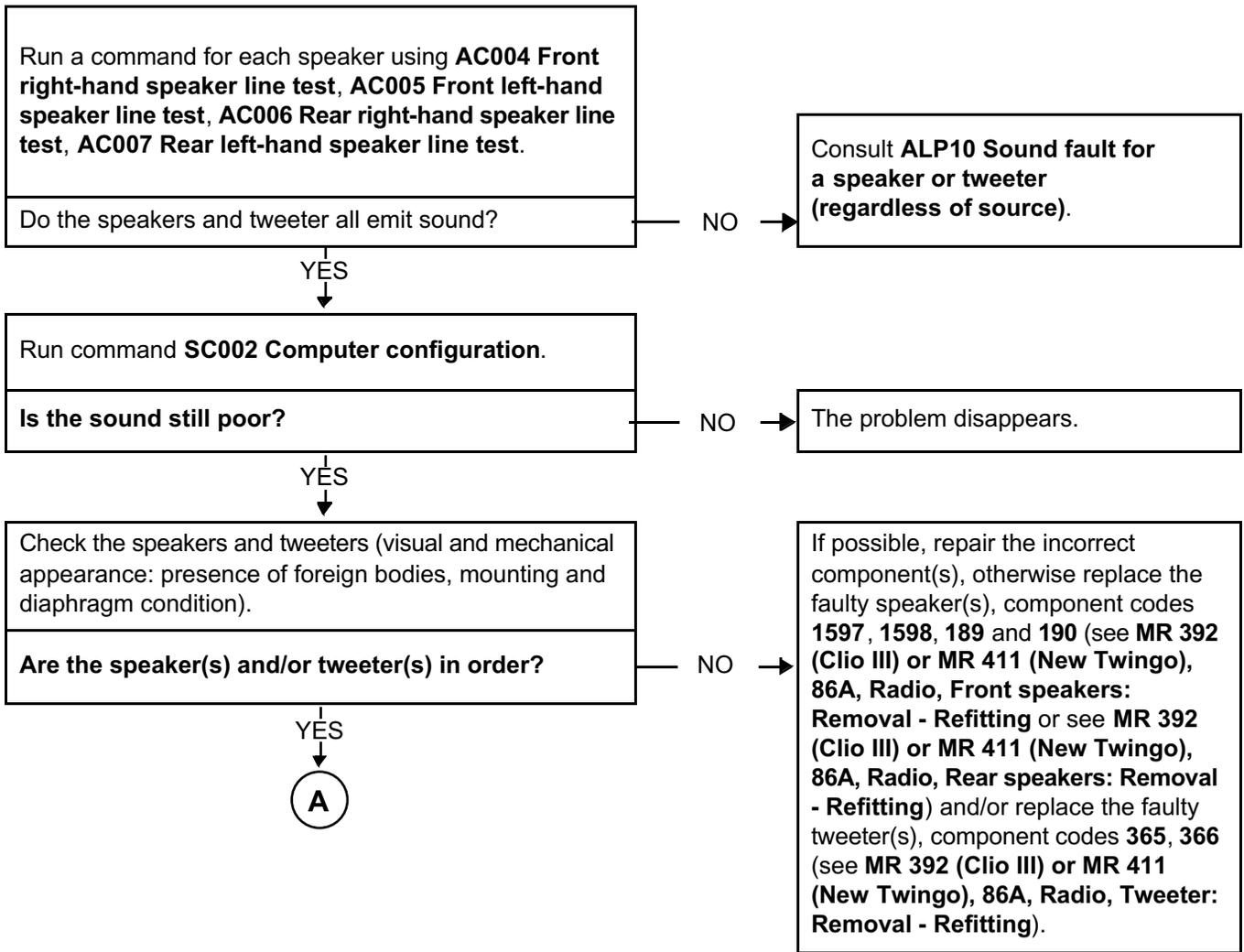


AFTER REPAIR	Carry out another fault finding check on the system. Deal with any faults.
---------------------	---

Fault finding – Fault Finding Chart

ALP 14	Poor sound (regardless of the source).
---------------	---

NOTES	Use the Wiring Diagrams Technical Note for Clio III or New Twingo .
--------------	--



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

Fault finding – Fault Finding Chart

**ALP 14
CONTINUED**

A
YES

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

- **34A** between components **261** and **190**,
- **34B** between components **261** and **190**,
- **34C** between components **261** and **189**,
- **34D** between components **261** and **189**,
- **34E** between components **261**, **365** and **1598** (left-hand drive) or **1597** (right-hand drive),
- **34F** between components **261**, **365** and **1598** (left-hand drive) or **1597** (right-hand drive),
- **34G** between components **261**, **366** and **1598** (right-hand drive) or **1597** (left-hand drive),
- **34H** between components **261**, **366** and **1598** (right-hand drive) or **1597** (left-hand drive).

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
↓

Is the fault located on a component (speaker, tweeter)?

YES →

Replace the faulty speaker, component codes **1597**, **1598**, **189** and **190** (see **MR 392 (Clio III)** or **MR 411 (New Twingo), 86A, Radio, Front speakers: Removal - Refitting** or see **MR 392 (Clio III)** or **MR 411 (New Twingo), 86A, Radio, Rear speakers: Removal - Refitting**) and/or replace the faulty tweeter(s), component codes **365**, **366** (see **MR 392 (Clio III)** or **MR 411 (New Twingo), 86A, Radio, Tweeter: Removal - Refitting**).

NO
↓

Contact the Techline.

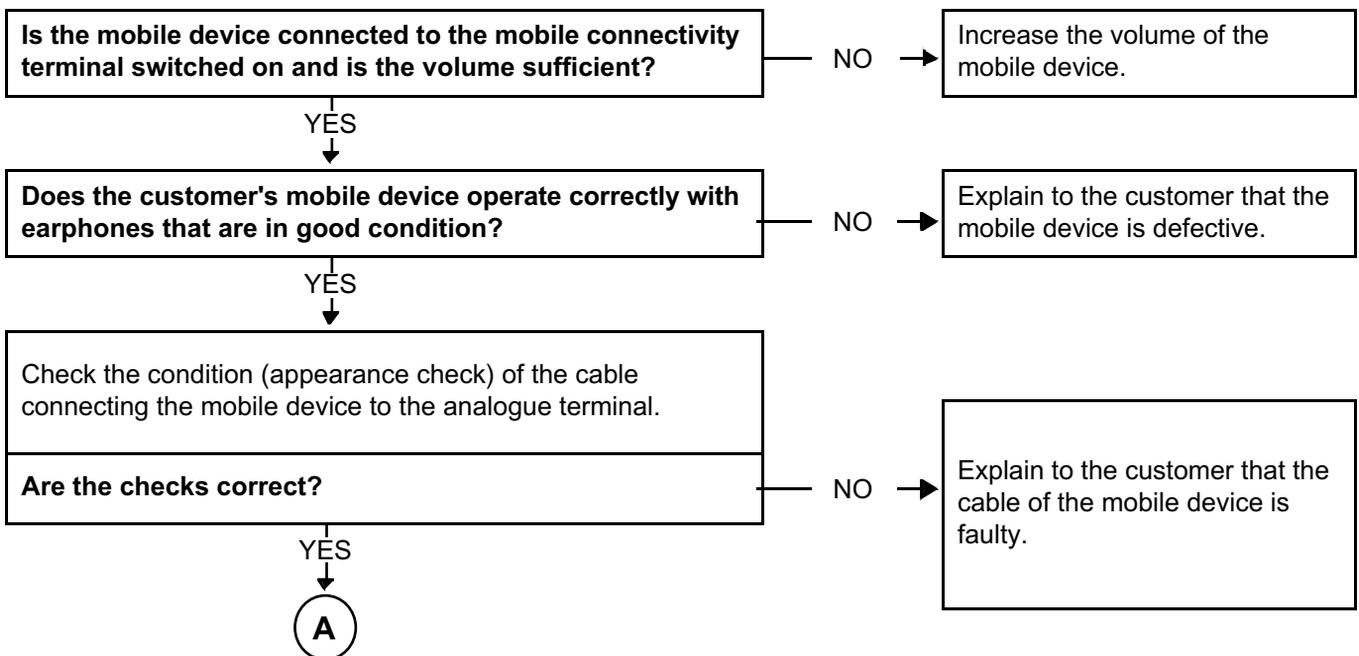
AFTER REPAIR

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

Fault finding – Fault Finding Chart

ALP 15	Fault when using the mobile connectivity terminal
---------------	--

NOTES	See Clio III or New Twingo wiring diagrams.
	ALP 15 is used to run fault finding on the mobile connectivity terminal if a mobile connectivity computer is not fitted on the vehicle.
	In a vehicle equipped with a navigation computer, the terminal is connected to the navigation computer, component code 662 . Otherwise, it is connected to the radio, component code 261 .



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

Fault finding – Fault Finding Chart

ALP 15 CONTINUED	
-----------------------------	--



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

- **34EE** between components **1877** and **261** or **662**,
- **34ET** between components **1877** and **261** or **662**,
- **34EC** between components **1877** and **261** or **662**,
- **TB37** between components **1877** and **261** or **662**,

as well as the condition of the shielding **TB37** between the mobile connectivity computer, component code **1877** and component **261** or **662**.

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.



Contact the Techline.

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