

MEGANE

8 Electrical equipment

87G

ENGINE COMPARTMENT CONNECTION UNIT

UPC

Vdiag No.: 48, 4C

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V7

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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1. SCOPE OF THIS DOCUMENT

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

Vehicle(s): **Mégane II, Scenic II**

Function concerned: **Engine compartment connection unit**

Name of computer: **Protection and Switching Unit**

Program No.: **C54**

Vdiag no.: **48, 4C**

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 (CD-ROM), paper.

Type of diagnostic tools:

- **CLIP + multiplex line sensor**

Special tooling required:

Special tooling required	
	Multimeter, oscilloscope
Elé. 1681	Universal bornier

3. REMINDER

PROCEDURE

To run fault finding on the vehicle's computers, switch on the ignition in fault finding mode (forced + after ignition feed). **Run the self-test procedure for the UPC internal relays and fuses using AC016 Electrical supply circuit test.**

WARNING

Switch off all unnecessary consumers:

- Radio navigation system.
- Switch the passenger compartment ventilation speed to 0.
- Switch off the interior lights (forced off).

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

With the vehicle card in the card reader, press and hold the start button (+ 5 seconds) outside starting conditions, connect the diagnostic tool and carry out the required operations.

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

Press the start button twice briefly (less than 3 seconds); check that the + after ignition feed has cut (computer indicator lights on the instrument panel go 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 following the + after ignition supply being switched on (without operating the system components).

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

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

If the fault is **confirmed** when the instructions in the Notes section 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 data that does not produce a fault on the **diagnostic tool** because 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.

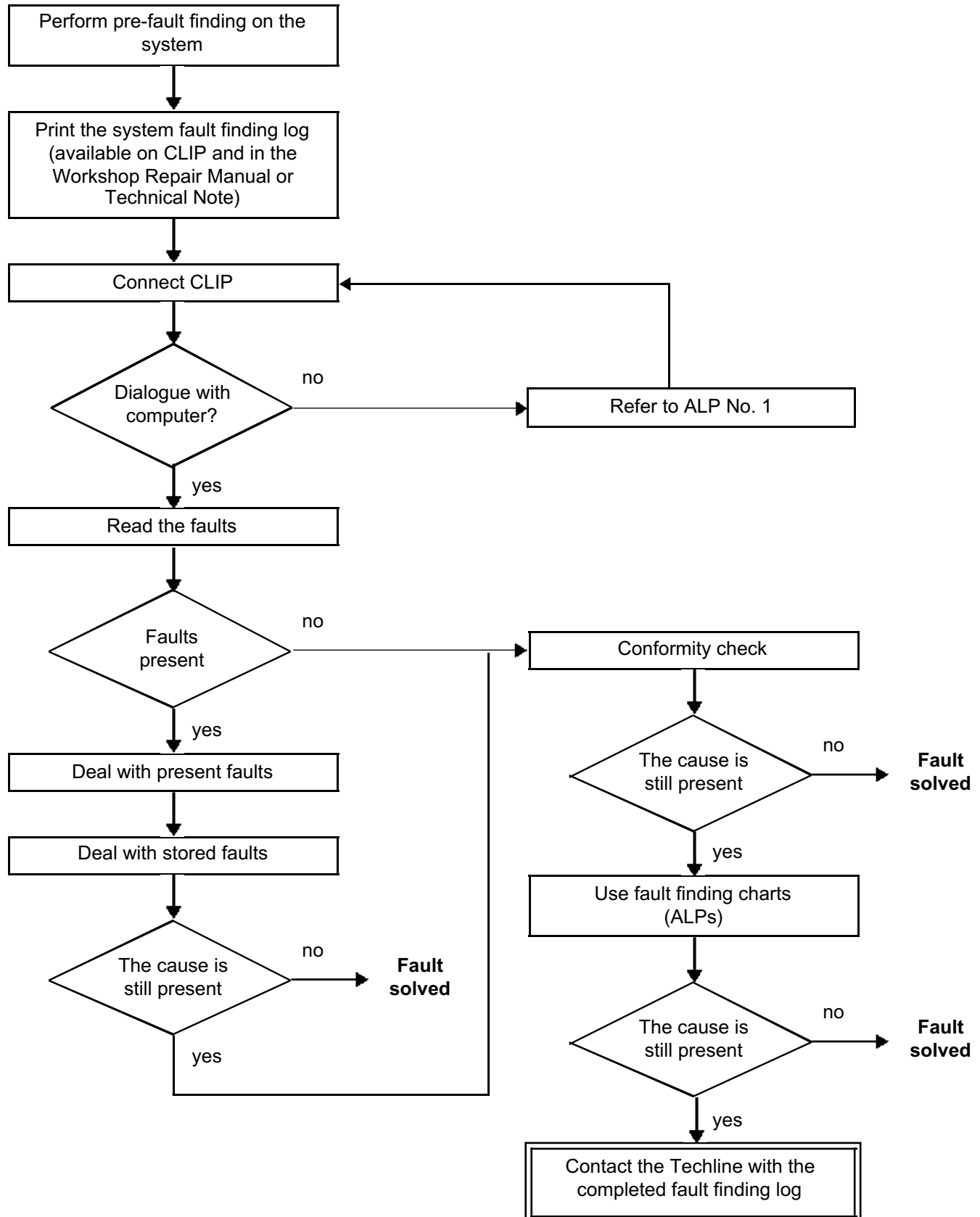
If a status is not behaving normally or a parameter is outside the permitted tolerance values, consult the corresponding fault finding page.

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 dealt with by **Customer complaints**.

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

4. FAULT FINDING PROCEDURE



4. FAULT FINDING PROCEDURE (continued)

Wiring check

Fault finding problems

Disconnecting the connectors and/or manipulating the wiring harness 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.

Tactile 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.

Inspection of each component

Disconnect the connectors and check the appearance of the clips and tabs, as well as the crimping (no crimping on the insulating section).
Make sure that the clips and tabs are properly locked in the sockets.
Check that no clips or tabs have been dislodged during connection.
Check the clip contact pressure using an appropriate model of tab.

Continuity, insulation and resistance check

Check the continuity of entire lines, then section by section.
Look for a short circuit to earth, to + 12 V or to another wire.

If a fault is detected, repair or replace the wiring harness.

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 procedure, enables you to keep track of the procedure which is carried out. It is an essential document when consulting the manufacturer.

IT IS THEREFORE ESSENTIAL THAT THE FAULT FINDING LOG IS FILLED OUT EVERY TIME IT IS REQUESTED BY TECHLINE OR THE WARRANT 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 ADVICE

Safety rules must be observed during any work on a component to prevent any damage or injury:

- check that the battery is sufficiently charged (see **TEST3 Battery status test**),
- use the appropriate tools,
- do not touch the xenon bulbs.
- do not work on the **COSLAD** system when it is in operation, the voltage is greater than or equal to **20,000 V**.

General operation

The Protection and Switching Unit is involved in the following functions:

- Access - Safety.
- Air conditioning.
- Lighting.
- Wipers.
- Charging circuit.
- Oil pressure detection.
- Electric power distribution.

1 - Electric power distribution

The main function of the Protection and Switching Unit is to switch and distribute the power supply to the vehicle's systems, actuators or computers.

Part of this function is handled within the unit, but it is not electronically controlled by the computer.

+ 12 V battery feed

The Protection and Switching Unit receives energy from the battery via the Busbar and MM connectors (tracks 6 and 4) and redistributes the + 12 V feed.

+ 12 V after ignition

The UCH sends the Protection and Switching Unit the + 12 V after ignition feed request via the multiplex network. When the Protection and Switching Unit receives this request, it actuates the after ignition relay unconditionally. The signal is distributed to the sensors, actuators and computers.

2 - Charge circuit

One of the main functions of the Protection and Switching Unit is managing the charge circuit.

Purpose and components:

The main function of the charging circuit is to produce and distribute the electrical energy required to operate the various electrical consumers on the vehicle (computers, lights, etc.).

It is also used to start the engine.

The main components are a battery, an alternator and a starter motor.

a) Battery

The principal purpose of the battery is to provide the powerful current briefly required by the starter motor to start the engine. For optimum starting, the current supplied by the battery must be sent to the starter motor with minimum loss. To achieve this, the electrical connections (wires, terminals, connectors, etc.) must be in good condition. When the engine is not running, the battery must feed the accessories that operate constantly, even with the ignition switched off, such as the alarm, radio codes, computers, etc.

Note:

A battery must always be fully charged, even when stored.

- **PR004 Battery voltage** represents the supply voltage of the Protection and Switching Unit.
- **PR008 Battery voltage after rest** represents the battery charge status. If **PR008** is less than **12.1 V (battery discharged)** during the first few miles, a "Charge battery" message is displayed on the instrument panel.

The Protection and Switching Unit determines what the voltage across the battery terminals should be, based on the battery charge status, the operating phase and the battery temperature.

To obtain this voltage, the Protection and Switching Unit actuates the alternator.

b) Alternator

The alternator only operates when the engine is running. Its function is to recharge the battery, and at the same time to supply the electrical power required to operate all the electrical accessories on the vehicle.

The Protection and Switching Unit is linked to the alternator by a serial connection. The Protection and Switching Unit and the alternator communicate via this connection.

Alternator management is therefore completely new in relation to previous Renault vehicles.

The Protection and Switching Unit intelligently manages the alternator regulation voltage according to the engine phase, the battery charge and the temperature.

The alternator sends the Protection and Switching Unit the following signals:

- Type of alternator: the Protection and Switching Unit configures itself according to the alternator specifications.

The Protection and Switching Unit can detect electrical or communication faults on this connection and signal them using fault **DF007 UPC - Alternator connection**.

When the battery charge and **PR008 Battery voltage after rest** decline, the Protection and Switching Unit can temporarily increase the alternator voltage by **1 V** for a duration of **30 minutes** after starting.

Before the engine is started and during starting, the alternator voltage is fixed at **10.6 V**.

A maximum of **30 seconds** after the engine is started, the Protection and Switching Unit sets the alternator voltage at the optimum calculated value.

Only on vehicles with M9R injection:

The injection computer also acts on the alternator regulation voltage. The injection computer sends the maximum authorised power delivered by the engine, to the UPC computer via the multiplex network. If the power from the engine is less than the power consumed by the alternator, the UPC computer will reduce the alternator voltage.

For vehicles with any injection type except **M9R**:

The UPC sends the alternator charge to the injection to regulate the idling speed.

c) Starter

This turns the engine over to make it start, and requires a very powerful electric current, which the battery must be able to supply.

The computer receives the starter activation request via the multiplex network from:

- injection,
- UCH,
- the automatic gearbox.

(see **ET010 Starting conditions met**)

The computer controls the starter relay.

In the event of a fault with the starter, refer to section **16A, Starting - Charging, Starter**.

3 - Keyless vehicle

Under the keyless vehicle function, the Protection and Switching Unit is involved in the starting sub-function. The computer:

- receives the supply request from the passenger compartment starter via the multiplex network, as well as the clutch pedal position,
- controls the starter relay,
- inhibits or cuts out this relay control according to a signal prohibiting starting which is sent by the injection computer or gearbox via the multiplex network (see **87B, Passenger compartment connection unit**).

4 - Air conditioning

For the operation of the air conditioning and the role of the Protection and Switching Unit in the control of this function (see **62A, Air conditioning**).

Cold loop:

The computer receives the compressor switch-on request from the injection via the multiplex network.
The computer controls the compressor clutch engagement relay.

Heating:

The computer manages the alternator charge and sends back the signal over the multiplex network.
The computer also controls the rear screen de-icing.

5 - Exterior lighting

The Protection and Switching Unit receives lighting requests from the UCH via the multiplex network.

The computer then switches the power relays:

- side lights,
- dipped headlights,
- main beam headlights,
- front fog light.

For the operation of this function and the role of the Protection and Switching Unit in the control of this function, (see **80D, Lighting**).

6 - Wiping - Washing

The Protection and Switching Unit receives wiping requests from the UCH via the multiplex network.

The computer then switches the power relays:

- low or high-speed windscreen wiper,
- headlight washers pump relay.
- The Protection and Switching Unit also receives the windscreen wiper park position signal. Using this signal the computer can determine whether the blade is jammed, and decide whether to stop the wiper motor to protect it.

For the operation of this function and the role of the Protection and Switching Unit in the control of this function, (see **85A, Wipers-Washing**).

7 - Oil pressure detection

The Protection and Switching Unit receives the oil pressure sensor signal and distributes it over the multiplex network.

8 - Reverse gear engaged signal

The Protection and Switching Unit receives the reverse gear engaged position sensor signal and distributes it over the multiplex network.

9 - Injection

The Protection and Switching Unit is involved in injection operation, relating to supplying the computer and its sensors.

Supply malfunctions may lead to engine management customer complaints (rough idle, etc.).

10 - Fuse fault finding

The Protection and Switching Unit can detect the condition of its fuses and indicate faults using:

- DF014 LEFT-HAND SIDE LIGHT CIRCUIT.
- DF015 RIGHT-HAND SIDE LIGHT CIRCUIT.
- DF016 LEFT-HAND DIPPED HEADLIGHT CIRCUIT.
- DF017 RIGHT-HAND DIPPED HEADLIGHT CIRCUIT.
- DF018 LEFT-HAND MAIN BEAM HEADLIGHT CIRCUIT.
- DF019 RIGHT-HAND MAIN BEAM HEADLIGHT CIRCUIT.
- DF020 FRONT FOG LIGHT CIRCUIT.
- DF021 REVERSING LIGHT(S) CIRCUIT.
- DF022 REAR SCREEN DE-ICER CIRCUIT.
- DF023 FRONT WINDSCREEN WIPER CIRCUIT.
- DF024 GAS COMPUTER SUPPLY.
- DF025 AIRBAG/ELECTRIC POWER-ASSISTED STEERING SUPPLY.
- DF026 AUTOMATIC TRANSMISSION SUPPLY.
- DF029 STEERING COLUMN LOC/ENGINE MANAGEMENT SUPPLY.
- DF030 AIR CONDITIONING COMPRESSOR SUPPLY CIRCUIT.
- DF031 HEADLIGHT WASHERS SUPPLY CIRCUIT.
- DF032 + 12 V RELAY SUPPLY CIRCUIT.
- DF036 STEERING COLUMN LOCK SUPPLY CIRCUIT.

To carry out fault finding on the fuses, run command **AC016 Test electrical supply circuits**.

If a fuse is faulty, the associated fault becomes **STORED**.

Once the fuse has been replaced or the repair completed, run command **AC016 Test electrical supply circuits** again to clear the fault.

Protection and Switching Unit Version

There are 4 Protection and Switching Unit versions:

- N1: vehicle with a **340 W fan assembly**.
- N2: vehicle with a **460 W fan assembly**.
- N3: vehicle with a **550 W fan assembly** (external relay).
- N4: vehicle with **340 W, 460 W or 550 W fan assemblies + automatic transmission and/or LPG and/or with headlight washers**.

To remove and refit the **UPC** computer:

- Mégane (see **MR 364, Mechanical, 87G, Engine compartment connection unit: Removal - Refitting**).
- Scénic (see **MR 370, Mechanical, 87G, Engine compartment connection unit: Removal - Refitting**).

Once this operation is complete, run **VP004 Vehicle parameters** (see **Configurations and programming**).

Switch the ignition off and on again for the configurations to be recognised.

IMPORTANT

Removing or replacing the Protection and Switching Unit computer relays is forbidden.

Equipment required**CLIP diagnostic tool**

This operation is used to configure the Protection and Switching Unit to the equipment present in the vehicle.

Configuration	Configuration reading	Name of configuration
Automatic (the alternator is automatically recognised by the Protection and Switching Unit)	LC001	Type of alternator
VP004	LC008	Gearbox type
VP004	LC007	Front fog lights
VP004	LC013	Headlight washers

Procedure to follow for modifying these configurations:

- Establish dialogue with the UPC.
- Select the **repair mode** menu.
- Select the **configure** menu.
- Select line **VP004 Vehicle parameters**.
- Select the line corresponding to the vehicle equipment from the drop-down menus.
- Confirm the configurations selected and then click on **validate**.
- Switch the ignition off and then back on for the configurations to be recognised by the computer.
- In the **configuration reading** menu, check that each configuration has been performed.

Make sure that all the vehicle's equipment is working.

Summary of faults on which fault finding can be performed by the Protection and Switching Unit.
(With corresponding design office codes).

Tool fault	Associated DTC	Diagnostic tool title
DF006	920E	COMPUTER
DF007	9211	UPC - ALTERNATOR CONNECTION
DF009	9214	+ AFTER IGNITION FEED CIRCUIT (Vdiag 4C only)
DF012	9210	ALTERNATOR
DF013	920F	VOLTAGE REGULATION
DF014	9217	LEFT-HAND SIDE LIGHT CIRCUIT
DF015	9218	RIGHT-HAND SIDE LIGHT CIRCUIT
DF016	9215	LEFT-HAND DIPPED HEADLIGHT CIRCUIT
DF017	9216	RIGHT-HAND DIPPED HEADLIGHT CIRCUIT
DF018	921B	LEFT-HAND MAIN BEAM HEADLIGHT CIRCUIT
DF019	921C	RIGHT-HAND MAIN BEAM HEADLIGHT CIRCUIT
DF020	921D	FRONT FOG LIGHT CIRCUIT
DF021	9226	REVERSING LIGHT(S) CIRCUIT
DF022	921E	REAR SCREEN DE-ICER CIRCUIT
DF023	921A	WINDSCREEN WIPER CIRCUIT
DF024	9222	GAS COMPUTER SUPPLY
DF025	9223	ELECTRIC POWER ASSISTED STEERING/AIRBAG SUPPLY
DF026	9224	AUTOMATIC GEARBOX SUPPLY
DF027	9225	ACCESSORIES SUPPLY
DF029	9221	INJECTION/STEERING COLUMN LOCK SUPPLY
DF030	9219	CLIMATE CONTROL COMPRESSOR SUPPLY CIRCUIT
DF031	921F	HEADLIGHT WASHER SUPPLY CIRCUIT
DF032	9227	+12 V RELAY SUPPLY CIRCUIT
DF033	9229	FAN ASSEMBLY SUPPLY CIRCUIT
DF034	9212	ALTERNATOR TYPE
DF035	9213	COMPUTER SUPPLY VOLTAGE
DF036	9220	STEERING COLUMN LOCK SUPPLY CIRCUIT

DF006 PRESENT OR STORED	<u>COMPUTER</u> 1.DEF: Internal electrical fault
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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.
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If the fault is present, contact Techline.

AFTER REPAIR	Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check using the diagnostic tool .
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DF007 PRESENT OR STORED	<u>UPC - ALTERNATOR CONNECTION</u> CO: Open circuit CC: Short circuit to earth 1.DEF: Communication disrupted
--	--

NOTES	Special notes: – Check the conformity of the wiring (see Test no. 2 Wiring test). Repair if necessary.
	– The fault illuminates the Battery charge warning light on the instrument panel and the STOP warning light.
	– Conditions for applying the fault finding procedure to stored faults: The fault is declared present after the engine has been running for 10 minutes .
	Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

CO	NOTES	+ APC. Engine stopped.
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Disconnect the UPC-Alternator connection for the alternator **component code 103**.
Check the connection and condition of the alternator **connector, component code 103**.
If the connector is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the connector, otherwise replace the connector.

Measure the voltage on connection **2N** between the alternator, **component code 103** and the battery earth, **component code 107**.

If the voltage is less than 3 V

Check the connection and condition of **connector MT1 for the Protection and Switching Unit, component code 1337**.

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

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

– **2N** between components **1337** and **103**.

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

If the fault is still present, replace the Protection and Switching Unit (see Replacement of components).

AFTER REPAIR	Erase the faults from the computer memory, switch the + after ignition supply off and back on again, and run another check using the diagnostic tool after 10 minutes with the engine running .
---------------------	--

DF007
CONTINUED 1

If the voltage is greater than 9 V

Replace the **Protection and Switching Unit** (see **Replacement of components**).

If the voltage is greater than or equal to 3 V and less than or equal to 9 V

If the voltage is greater than or equal to **3 V** and less than or equal to **9 V**:

Use an oscilloscope to record the presence of a square pulse signal on **connection 2N** between the **alternator, component code 103** and the **Protection and Switching Unit, component code 1337** on the alternator side. Connect the oscilloscope between the connector of the **UPC- alternator** connection on the alternator side and the battery earth, **component code 107**.

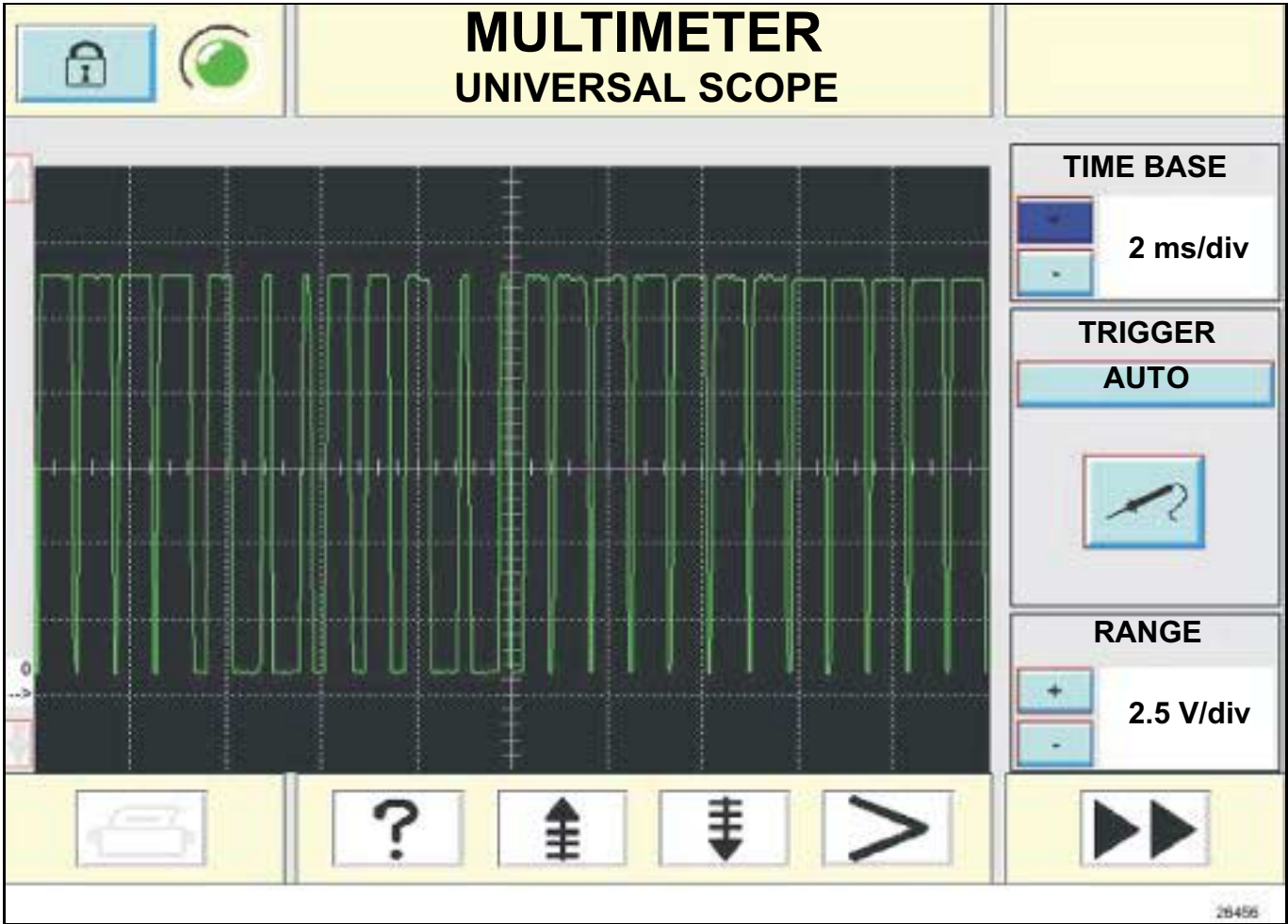
Adjust the oscilloscope:

- calibration: **2.5 V/div**,
- time base: **2 ms/div**.

AFTER REPAIR

Erase the faults from the computer memory, switch the + after ignition supply off and back on again, and run another check **using the diagnostic tool after 10 minutes with the engine running**.

DF007
CONTINUED 2



Perform three successive acquisitions at intervals of **10 to 15 seconds**.
Check that the signal resembles the image above.
If so:
Replace the alternator (see **MR 364 or 370 Mechanical, 16A, Starting - Charging, Alternator: Removal - Refitting**).
Otherwise:
Contact Techline.

AFTER REPAIR

Erase the faults from the computer memory, switch the + after ignition supply off and back on again, and run another check **using the diagnostic tool after 10 minutes with the engine running**.

DF007
CONTINUED 3

1.DEF

NOTES

None.

Check the connection and condition of the alternator **connector**, **component code 103**.

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

Check the connection and condition of **connector MT1 for the Protection and Switching Unit**, **component code 1337**.

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

With the engine running, switch on the electrical heated rear screen.

Measure the voltage between the earth of the alternator casing **component code 103** and the battery earth **component code 107**.

If the difference is over **1 V**, check the vehicle earths.

If the fault is still present, contact the Techline.

AFTER REPAIR

Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check **using the diagnostic tool**.

DF007
CONTINUED 4

CC

NOTES

None.

Check the connection and condition of the alternator **connector**, **component code 103**.

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

Check the connection and condition of **connector MT1 for the Protection and Switching Unit**, **component code 1337**.

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

Disconnect the **UPC-Alternator** connection for the alternator and the **Protection and Switching Unit**.

Ensure that the **UPC-Alternator** connection is insulated in relation to the **+ 12V** supply and the **earth**:

– **2N** between components **1337** and **103**.

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

If the fault is still present, disconnect the connector from the Protection and Switching Unit.

In **+ after ignition feed**, measure the voltage of the connector **MT1 for the Protection and Switching Unit on connection code 2N**.

If the voltage is less than **3V** or greater than **9V**:

Replace the **Protection and Switching Unit** (see **Replacement of components**).

If the voltage is between **3V** and **9V**:

Replace the **alternator** (see **MR 364 or MR 370 Mechanical, 16A, Starting - Charging, Alternator: Removal - Refitting**).

AFTER REPAIR

Erase the faults from the computer memory, switch the **+ after ignition** supply off and back on again and run another check **using the diagnostic tool**.

DF009 PRESENT OR STORED	+ APC CIRCUIT 1.DEF: Permanent low level 2.DEF: Permanent high signal
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NOTES	Special note: This fault only applies to Vdiag 4C .
	Conditions for applying the fault finding procedure to present faults: The fault is declared present after the ignition has been switched on.
	Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check the connection and condition of the **LPG electric control unit connector, component code 997**.
Check for a voltage on connection **AP31** to the connector for the **LPG electric control unit, component code 997**.
If the connection is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring otherwise replace the wiring.

Check the connection and condition of the **multifunction switch, the reverse gear switch and the manual gearbox neutral sensor/reversing lights, component codes 485, 155, and 1109**.
Check for a voltage on connection **AP11** to the connectors for the **multifunction switch, the reverse gear switch and the manual gearbox neutral sensor/reverse lights, component codes 485, 155, and 1109**.
If the connection is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring otherwise replace the wiring.

Check the connection and condition of the **passenger compartment electric control unit, component code 645**.
Check for a voltage on connection **APCB** to the connector for the **passenger compartment electric control unit, component code 645**.
If the connection is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring otherwise replace the wiring.

Check the connection and condition of the **electric steering column lock, component code 1088**.
Check for a voltage on connection **AP15** to the connector for the **electric steering column lock, component code 1088**.
If the connection is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring otherwise replace the wiring.

Check the connection and condition of the **airbag/pretensioner electric control unit and the electric power-assisted steering system, component codes 756 and 1232**.
Check for a voltage on connection **AP44** to the connectors for the **airbag/pretensioner electric control unit and the electric power-assisted steering system connectors, component codes 756 and 1232**.
If the connection is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring otherwise replace the wiring.

AFTER REPAIR	Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check using the diagnostic tool .
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DF009
CONTINUED

Check the connection and condition of the **passenger compartment fuse and relay box**, the **gear lever display**, the **steering column top control module**, the **additional heater relay 1 and 2**, the **diagnostic socket**, the **parking distance control ECU**, the **right and left-hand rear electric window switch**, the **radio**, the **electric door mirror control**, the **front and rear electric window locking controls** and the **passenger electric window switch**, component codes **260, 1129, 1546, 1067, 1068, 225, 1222, 130, 131, 261, 134, 135, 1511, 1512 and 133**.

Check for a voltage on connection **AP43** to the connectors for the **passenger compartment fuse and relay box**, the **gear lever display**, the **steering column top control module**, the **additional heater relay 1 and 2**, the **diagnostic socket**, the **parking distance control ECU**, the **right and left-hand rear electric window switch**, the **radio**, the **electric door mirror control**, the **front and rear electric window locking controls**, the **passenger electric window switch**, component codes **260, 1129, 1546, 1067, 1068, 225, 1222, 130, 131, 261, 134, 135, 1511, 1512 and 133**.

If the connection or 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.

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

- **AP31** between components **1337 and 997**,
- **AP11** between components **1337, 485, 155 and 1109**,
- **APCB** between components **1337 and 645**,
- **AP15** between components **1337 and 1088**,
- **AP44** between components **1337, 756 and 1232**,
- **AP43** between components **1337, 260, 1129, 1546, 1067, 1068, 225, 1222, 130, 131, 261, 134, 135, 1511, 1512 and 133**.

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.

Check the connection and condition of the **Protection and Switching Unit**, component code **1337**.

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

If the fault is still present, contact the Techline.

AFTER REPAIR

Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check **using the diagnostic tool**.

DF012 PRESENT OR STORED	<u>ALTERNATOR</u> 1.DEF: Alternator mechanical or electrical fault
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NOTES	Conditions for applying the fault finding procedure to present faults: The fault is declared present after the engine has been running for at least 1 minute.
	Special note: The fault illuminates the Battery and STOP warning lights on the instrument panel.
	Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

1.DEF	NOTES	None.
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Check the fitting, condition and tension of the accessories drive belt.

Visually check that the alternator is not clogged.
Clean out the alternator cooling vents using an air gun.

Check the wiring, the connections and the earths (see **Test no. 1 Wiring test**).
If the connection is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring otherwise replace the wiring.

Run command **AC014 Alternator regulation** (see **Interpretation of commands**).

With the bonnet closed, start the engine.
Leave the engine to run for 2 minutes at idle speed.
If the fault is still present, replace the alternator (see **MR 364 or MR 370 Mechanical, 16A, Starting - Charging, Alternator: Removal - Refitting**).

AFTER REPAIR	Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check using the diagnostic tool .
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<p>DF013 PRESENT OR STORED</p>	<p><u>VOLTAGE REGULATION</u></p> <p>1.DEF: Voltage too low 2.DEF: Voltage too high</p>
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<p>NOTES</p>	<p>Special note: Deal with the faults DF012 Alternator and DF007 UPC - alternator connection first if they are present or stored.</p>
	<p>Conditions for applying the fault finding procedure to stored faults: The fault is declared present with the engine running.</p>
	<p>Use Wiring Diagrams Technical Note for Mégane II or Scénic II.</p>

<p>Check the conformity of the wiring (see Test no. 2 Wiring test). If the connection is faulty and if there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring otherwise replace the wiring.</p>
<p>Check the conformity of the parameter PR004 Battery voltage (see Interpretation of parameters).</p>
<p>If the fault is still present, contact the Techline.</p>

<p>AFTER REPAIR</p>	<p>Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check using the diagnostic tool.</p>
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DF014 PRESENT OR STORED	<u>LEFT-HAND SIDE LIGHT CIRCUIT</u> CO: Open circuit CC.0: Short circuit to earth
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CO	NOTES	Special note: To display this fault as present or stored, run the command AC016 Electrical supply circuit test .
		Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check that the front left-hand side light bulb is sound.
Repair if necessary.

Check the condition and connection of the connector to the left-hand headlight, **component code 227** (tabs bent, broken, oxidised).
If the connector is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the connector, otherwise replace the connector.

Check that the **earth connection code MAS**, for the left-hand headlight connector is perfect.
If the connection is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring otherwise replace the wiring.

Check the condition and connection of the Protection and Switching Unit **8-track connector AN** (tabs broken, bent or oxidised).
If the connector is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the connector, otherwise replace the connector.

Check the **insulation, continuity and the absence of interference resistance** on the following connection:
– **LPG** between components **1337** and **227**.
If the connection is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring otherwise replace the wiring.

Check the fitting and switch on the left-hand headlight.
Repair if necessary or replace the light if it is faulty.

If the fault is still present, contact the Techline.

AFTER REPAIR	Run command AC016 "Electrical supply circuits test" . Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check using the diagnostic tool .
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DF014 CONTINUED	
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CC.0	NOTES	Special note: To display this fault as present or stored, run the command AC016 Electrical supply circuit test.
		Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check the conformity of the fuse F1 (7.5A) for the Protection and Switching Unit, component code 1337.
Check the insulation, continuity and the absence of interference resistance on the following connection: – MAS between components 1337 and 227 . If the connection is faulty and if there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring otherwise replace the wiring.
If the fault is still present, contact the Techline.

AFTER REPAIR	Run command AC016 "Electrical supply circuits test" . Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check using the diagnostic tool .
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DF015 PRESENT OR STORED	<u>RIGHT-HAND SIDE LIGHT CIRCUIT</u> CO: Open circuit CC.0: Short circuit to earth
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CO	NOTES	Special note: To display this fault as present or stored, run the command AC016 Electrical supply circuit test .
		Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check that the front right-hand side light bulb is sound. Repair if necessary.
Check the condition and connection of the right-hand headlight, component code 226 (tabs broken, bent or oxidised). If the connector is faulty and if there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the connector, otherwise replace the connector.
Check that the earth connection code MAS for the right-hand headlight connector, component code 226 is perfect. If the connection is faulty and if there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring otherwise replace the wiring.
Check the condition and connection of the Protection and Switching Unit 8-track AN connector, component code 1337 (tabs broken, bent or oxidised). If the connector is faulty and if there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the connector, otherwise replace the connector.
Check the insulation, continuity and the absence of interference resistance on the following connection: – LPD , between components 1337 and 226 . If the connection is faulty and if there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring otherwise replace the wiring.
Check the fitting and switch on the right-hand headlight. Repair if necessary or replace the light if it is faulty.
If the fault is still present, contact the Techline.

AFTER REPAIR	Run command AC016 "Electrical supply circuits test" . Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check using the diagnostic tool .
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DF015 CONTINUED	
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CC.0	NOTES	Special note: To display this fault as present or stored, run the command AC016 Electrical supply circuit test.
		Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check the conformity of the fuse F2 (7.5A) for the Protection and Switching Unit, connection code 1337.
Check the insulation, continuity and the absence of interference resistance on the following connection: – MAS between components 1337 and 226 . If the connection is faulty and if there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring otherwise replace the wiring.
If the fault is still present, contact the Techline.

AFTER REPAIR	Run command AC016 "Electrical supply circuits test" . Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check using the diagnostic tool .
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DF016 PRESENT OR STORED	<u>LEFT-HAND DIPPED HEADLIGHT CIRCUIT</u> CO: Open circuit CC.0: Short circuit to earth
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CO	NOTES	Special note: To display this fault as present or stored, run the command AC016 Electrical supply circuit test .
		Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check that the left-hand dipped beam headlight bulb is sound.
Repair if necessary.

Check the condition and connection of the connector for the **left-hand headlight, component code 227** (tabs bent, broken, oxidised).
If the connector is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the connector, otherwise replace the connector.

Check that the **earth, connection code MAS** for the **left-hand headlight connector, component code 227** is perfect.
If the connection is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring otherwise replace the wiring.

Check the condition and connection of the 8-track connector **AN** for the **Protection and Switching Unit, component code 1337** (tabs bent, broken, oxidised).
If the connector is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the connector, otherwise replace the connector.

Check the **insulation, continuity and the absence of interference resistance** on the following connection:
– **CPG** between components 1337 and 227.
If the connection is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring otherwise replace the wiring.

Check the fitting and switch on the left-hand headlight.
Repair if necessary or replace the light if it is faulty.

If the fault is still present, contact the Techline.

AFTER REPAIR	Run command AC016 "Electrical supply circuits test" . Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check using the diagnostic tool .
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DF016 CONTINUED	
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CC.0	NOTES	Special note: To display this fault as present or stored, run the command AC016 Electrical supply circuit test.
		Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check the conformity of the fuse F4 (10A) for the Protection and Switching Unit.
Check the insulation, continuity and the absence of interference resistance on the following connection: – CPG between components 1337 and 227 . If the connection is faulty and if there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring otherwise replace the wiring.
If the fault is still present, contact the Techline.

AFTER REPAIR	Run command AC016 "Electrical supply circuits test" . Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check using the diagnostic tool .
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DF017 PRESENT OR STORED	<u>RIGHT-HAND DIPPED HEADLIGHT CIRCUIT</u> CO: Open circuit CC.0: Short circuit to earth
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CO	NOTES	Special note: To display this fault as present or stored, run the command AC016 Electrical supply circuit test .
		Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check that the right-hand dipped beam headlight bulb is sound.
Repair if necessary.

Check the condition and connection of the connector for the **right-hand headlight, component code 226** (tabs bent, broken, oxidised).
If the connector is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the connector, otherwise replace the connector.

Check that the **earth** on **connection code MAS** for the **right-hand headlight, component code 226** is perfect.
If the connection is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring otherwise replace the wiring.

Check the condition and connection of the 8-track connector **AN** for the **Protection and Switching Unit, component code 1337** (tabs bent, broken, oxidised).
If the connector is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the connector, otherwise replace the connector.

Check the **insulation, continuity and the absence of interference resistance** on the following connection:
– **CPD** between components **1337** and **226**.
If the connection is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring otherwise replace the wiring.

Check the fitting and switch on the right-hand headlight.
Repair if necessary or replace the light if it is faulty.

If the fault is still present, contact the Techline.

AFTER REPAIR	Run command AC016 "Electrical supply circuits test" . Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check using the diagnostic tool .
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DF017 CONTINUED	
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CC.0	NOTES	Special note: To display this fault as present or stored, run the command AC016 Electrical supply circuit test.
		Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check the conformity of the fuse F3 (10A) for the Protection and Switching Unit.
Check the insulation, continuity and the absence of interference resistance on the following connections: – CPD between components 1337 and 226 . If the connection is faulty and if there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring otherwise replace the wiring.
If the fault is still present, contact the Techline.

AFTER REPAIR	Run command AC016 "Electrical supply circuits test" . Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check using the diagnostic tool .
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DF018 PRESENT OR STORED	<u>LEFT-HAND MAIN BEAM HEADLIGHT CIRCUIT</u> CO: Open circuit CC.0: Short circuit to earth
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CO	NOTES	Special note: To display this fault as present or stored, run the command AC016 Electrical supply circuit test .
		Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check that the left-hand main beam headlight bulb is sound.
Repair if necessary.

Check the condition and connection of the connector for the **left-hand headlight, component code 227** (tabs bent, broken, oxidised).
If the connector is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the connector, otherwise replace the connector.

Check that the **earth, component code MAS** for the **left-hand headlight connector, component code 227** is perfect.
If the connection is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring otherwise replace the wiring.

Check the condition and connection of the 8-track connector **AN** for the **Protection and Switching Unit, component code 1337** (tabs bent, broken, oxidised).
If the connector is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the connector, otherwise replace the connector.

Check the **insulation, continuity and the absence of interference resistance** on the following connection:
– **RPG** between components 1337 and 227.
If the connection is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring otherwise replace the wiring.

Check the fitting and switch on the left-hand headlight.
Repair if necessary or replace the light if it is faulty.

If the fault is still present, contact the Techline.

AFTER REPAIR	Run command AC016 "Electrical supply circuits test" . Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check using the diagnostic tool .
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DF018 CONTINUED	
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CC.0	NOTES	Special note: To display this fault as present or stored, run the command AC016 Electrical supply circuit test.
		Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check the conformity of the fuse F6 (10A) for the Protection and Switching Unit.
Check the insulation, continuity and the absence of interference resistance on the following connection: – RPG between components 1337 and 227 . If the connection is faulty and if there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring otherwise replace the wiring.
If the fault is still present, contact the Techline.

AFTER REPAIR	Run command AC016 "Electrical supply circuits test" . Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check using the diagnostic tool .
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DF019 PRESENT OR STORED	<u>RIGHT-HAND MAIN BEAM HEADLIGHT CIRCUIT</u> CO: Open circuit CC.0: Short circuit to earth
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CO	NOTES	Special note: To display this fault as present or stored, run the command AC016 Electrical supply circuit test .
		Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check that the right-hand main beam headlight bulb is sound. Repair if necessary.
Check the condition and connection of the connector for the right-hand headlight, component code 226 (tabs bent, broken, oxidised). If the connector is faulty and if there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the connector, otherwise replace the connector.
Check that the earth on connection code MAS for the right-hand headlight, component code 226 is perfect. If the connection is faulty and if there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring otherwise replace the wiring.
Check the condition and connection of the 8-track connector AN for the Protection and Switching Unit, component code 1337 (tabs bent, broken, oxidised). If the connector is faulty and if there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the connector, otherwise replace the connector.
Check the insulation, continuity and the absence of interference resistance on the following connection: – RPD between components 1337 and 226 . If the connection is faulty and if there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring otherwise replace the wiring.
Check the fitting and switch on the right-hand headlight. Repair if necessary or replace the light if it is faulty.
If the fault is still present, contact the Techline.

AFTER REPAIR	Run command AC016 "Electrical supply circuits test" . Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check using the diagnostic tool .
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DF019 CONTINUED	
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CC.0	NOTES	Special note: To display this fault as present or stored, run the command AC016 Electrical supply circuit test.
		Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check the conformity of the fuse F7 (10A) for the Protection and Switching Unit.
Check the insulation, continuity and the absence of interference resistance on the following connection: – RPD between components 1337 and 226 . If the connection is faulty and if there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring otherwise replace the wiring.
If the fault is still present, contact the Techline.

AFTER REPAIR	Run command AC016 "Electrical supply circuits test" . Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check using the diagnostic tool .
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DF020 PRESENT OR STORED	<u>FRONT FOG LIGHT CIRCUIT</u> CO: Open circuit CC.0: Short circuit to earth
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CO	NOTES	Special note: To display this fault as present or stored, run the command AC016 Electrical supply circuit test .
		Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check that the front fog light bulbs are sound.
Repair if necessary.

Check the condition and connection of the 2-track connectors for the front fog lights, **component code 176 and 177** (tabs broken, bent or oxidised).
If the connector is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the connector, otherwise replace the connector.

Check that the **earth** on **connection code MAS** for the front right-hand fog light, **component code 176** is perfect.
If the connection is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring otherwise replace the wiring.

Check that the **earth** on **connection code MAS** for the front left-hand fog light, **component code 177** is perfect.
If the connection is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring otherwise replace the wiring.

Check the condition and connection of the 8-track connector **AN** for the **Protection and Switching Unit**, **component code 1337** (tabs bent, broken, oxidised).
If the connector is faulty and if there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the connector, otherwise replace the connector.

Check the **insulation, continuity and the absence of interference resistance** on the following connections:
– **8E** between components **1337** and **177**,
– **8F** between components **1337** and **176**.
If the connection or 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.

Check the fitting and switch for the **front fog lights**.
Repair if necessary or replace the light(s) if faulty.

If the fault is still present, contact the Techline.

AFTER REPAIR	Run command AC016 "Electrical supply circuits test" . Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check using the diagnostic tool .
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DF020
CONTINUED

CC.0

NOTES

To display this fault as present or stored, run the command
AC016 Electrical supply circuit test.

**Use Wiring Diagrams Technical Note for Mégane II or
Scénic II.**

Check the conformity of the fuse **F5 (20A) for the Protection and Switching Unit.**

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

- **8E** between components **1337** and **177**,
- **8F** between components **1337** and **176**.

If the connection or 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 is still present, contact the Techline.

AFTER REPAIR

Run command **AC016 "Electrical supply circuits test"**.

Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check **using the diagnostic tool**.

<p>DF021 PRESENT OR STORED</p>	<p><u>REVERSING LIGHT(S) CIRCUIT</u> CO: Open circuit CC.0: Short circuit to earth</p>
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<p>CC.0</p>	<p>NOTES</p>	<p>Special note: To display this fault as present or stored, run the command AC016 Electrical supply circuit test.</p> <p>Use Wiring Diagrams Technical Note for Mégane II or Scénic II.</p>
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<p>Check the conformity of the fuse F19 (10A) for the Protection and Switching Unit.</p> <p>Check the insulation, continuity and the absence of interference resistance on the following connections:</p> <ul style="list-style-type: none"> – H66P between components 1337 and 173, – H66P between components 1337 and 172. <p>If the connection or 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.</p> <p>If the fault is still present, contact the Techline.</p>	
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<p>AFTER REPAIR</p>	<p>Run command AC016 "Electrical supply circuits test". Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check using the diagnostic tool.</p>
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DF022 PRESENT OR STORED	<u>REAR SCREEN DE-ICER CIRCUIT</u> CO: Open circuit CC.0: Short circuit to earth
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CO	NOTES	Special note: To display this fault as present or stored, run the command AC016 Electrical supply circuit test .
		Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check the condition and connection of the heated rear screen, **component code 200** (tabs bent, broken or oxidised).

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

Check that the **earth** on **connection code MZ or MAQ** for the heated rear screen, **component code 200** is perfect.

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

Check the condition and connection of the 6-track connector **CM** for the **Protection and Switching Unit** (tabs bent, broken or oxidised).

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

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

– **15LP** between components **1337** and **200**.

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

If the fault is still present, contact the Techline.

AFTER REPAIR	Run command AC016 "Electrical supply circuits test" . Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check using the diagnostic tool .
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DF022 CONTINUED	
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CC.0	NOTES	To display this fault as present or stored, run the command AC016 Electrical supply circuit test .
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Check the conformity of the fuse F23 (30A) for the Protection and Switching Unit .
Check the insulation, continuity and the absence of interference resistance on the following connection: – 15LP between components 1337 and 200 . If the connection is faulty and if there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring otherwise replace the wiring.
If the fault is still present, contact the Techline.

AFTER REPAIR	Run command AC016 "Electrical supply circuits test" . Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check using the diagnostic tool .
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DF023 PRESENT OR STORED	<u>WINDSCREEN WIPER CIRCUIT</u> CC.0: Short circuit to earth
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CC.0	NOTES	Special note: To display this fault as present or stored, run the command AC016 Electrical supply circuit test.
		Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check the conformity of the fuse F9 (25A) for the Protection and Switching Unit.
Check the insulation, continuity and the absence of interference resistance on the following connections: – 14L between components 1337 and 212 , – 14K between components 1337 and 212 . If the connection or 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 is still present, contact the Techline.

AFTER REPAIR	Run command AC016 "Electrical supply circuits test" . Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check using the diagnostic tool.
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<p>DF024 PRESENT OR STORED</p>	<p><u>GAS COMPUTER SUPPLY</u> CO: Open circuit CC.0: Short circuit to earth</p>
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<p>CC.0</p>	<p>NOTES</p>	<p>Special note: To display this fault as present or stored, run the command AC016 Electrical supply circuit test.</p>
		<p>Use Wiring Diagrams Technical Note for Mégane II or Scénic II.</p>

<p>Check the conformity of the fuse F15 (10A) for the Protection and Switching Unit.</p>
<p>Check the insulation, continuity and the absence of interference resistance on the following connection: – AP31 between components 1337 and 997. If the connection is faulty and if there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring otherwise replace the wiring.</p>
<p>If the fault is still present, contact the Techline.</p>

<p>AFTER REPAIR</p>	<p>Run command AC016 "Electrical supply circuits test". Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check using the diagnostic tool.</p>
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DF025 PRESENT OR STORED	<u>ELECTRIC POWER ASSISTED STEERING/AIRBAG SUPPLY</u> CC.0: Short circuit to earth
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CC.0	NOTES	To display this fault as present or stored, run the command AC016 Electrical supply circuit test .
		Use Wiring Diagrams Technical Note for Mégane II or Scénic II .

Check the conformity of the fuse F10 (5A) for the Protection and Switching Unit .	
<p>Check the insulation, continuity and the absence of interference resistance on the following connections:</p> <ul style="list-style-type: none"> – AP44 between components 1337 and 1232, – AP44, between components 1337 and 756. <p>If the connection or 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.</p>	
If the fault is still present, contact the Techline.	

AFTER REPAIR	<p>Run command AC016 "Electrical supply circuits test".</p> <p>Erase the faults from the computer memory, switch the + after ignition supply off and back on again and run another check using the diagnostic tool.</p>
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Fault finding - Interpretation of faults

DF026 PRESENT OR STORED	<u>AUTOMATIC GEARBOX SUPPLY</u> CC.0 : Short circuit to earth
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CC.0	NOTES	Special note: To display this fault as present or stored, run command AC016 Electrical supply circuits test .
		Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check that UPC fuse F16 (5A) is correct.
Check the insulation, continuity and the absence of interference resistance on the following connection: – AP4 , between components 1337 and 119 . If the connection is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
If the fault is still present, contact the Techline.

AFTER REPAIR	Run command AC016 Electrical supply circuits test . Clear the computer fault memory, switch the + after ignition supply off and back on, and run another check with the diagnostic tool .
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Fault finding - Interpretation of faults

<p>DF027 PRESENT OR STORED</p>	<p><u>ACCESSORIES SUPPLY</u> CO : Open circuit CC.0 : Short circuit to earth</p>
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<p>CC.0</p>	<p>NOTES</p>	<p>Special note: To display this fault as present or stored, run command AC016 Electrical supply circuits test.</p>
		<p>Use Wiring Diagrams Technical Note for Mégane II or Scénic II.</p>

<p>Check that UPC fuse F17 (20A) is sound.</p>
<p>Check the insulation, continuity and the absence of interference resistance on the following connection: – AP43, on the Protection and Switching Unit, component code 1337. 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>
<p>If the fault is still present, contact the Techline.</p>

<p>AFTER REPAIR</p>	<p>Run command AC016 Electrical supply circuits test. Clear the computer fault memory, switch the + after ignition supply off and back on, and run another check with the diagnostic tool.</p>
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DF029 PRESENT OR STORED	<u>INJECTION/STEERING COLUMN LOCK SUPPLY</u> CC.0 : Short circuit to earth
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CC.0	NOTES	Special note: To display this fault as present or stored, run command AC016 Electrical supply circuits test .
		Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check that the UPC fuse F18 (5A) is correct.
Check the insulation, continuity and the absence of interference resistance on the following connections: – AP15 , between components 1337 and 120 , – AP15 , between components 1337 and 1088 . If the connection or connections are faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
If the fault is still present, contact the Techline.

AFTER REPAIR	Run command AC016 Electrical supply circuits test . Clear the computer fault memory, switch the + after ignition supply off and back on, and run another check with the diagnostic tool .
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DF030 PRESENT OR STORED	<u>CLIMATE CONTROL COMPRESSOR SUPPLY CIRCUIT</u> CC.0 : Short circuit to earth
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CC.0	NOTES	Special note: To display this fault as present or stored, run command AC016 Electrical supply circuits test.
		Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check that the UPC fuse F22 (10A) is correct.
Check the insulation, continuity and the absence of interference resistance on the following connection: – 38R , between components 1337 and 171 . If the connection is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
If the fault is still present, contact the Techline.

AFTER REPAIR	Run command AC016 Electrical supply circuits test . Clear the computer fault memory, switch the + after ignition supply off and back on, and run another check with the diagnostic tool .
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DF031 PRESENT OR STORED	<u>HEADLIGHT WASHER SUPPLY CIRCUIT</u> CC.0 : Short circuit to earth
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CC.0	NOTES	Special note: To display this fault as present or stored, run command AC016 Electrical supply circuits test .
		Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check that the UPC fuse F21 (15A) is correct.
Check the insulation, continuity and the absence of interference resistance on the following connections: – 39A , between components 1337 and 219 , – 39C , between components 1337 and 219 . If the connection or connections are faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
If the fault is still present, contact the Techline.

AFTER REPAIR	Run command AC016 Electrical supply circuits test . Clear the computer fault memory, switch the + after ignition supply off and back on, and run another check with the diagnostic tool .
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Fault finding - Interpretation of faults

DF032 PRESENT OR STORED	<u>+ 12 V RELAY SUPPLY CIRCUIT</u> CC.0 : Short circuit to earth
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CC.0	NOTES	Special note: To display this fault as present or stored, run command AC016 Electrical supply circuits test .
		Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check that UPC fuses F8 (25A), F12 (20A) and F20 (20A) are correct.

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

- **BP14**, between components **1337** and **118**,
- **BP42**, between components **1337** and **997**,
- **BP42**, between components **1337** and **119**,
- **BP27**, between components **1337** and **449**.

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

If the fault is still present, contact the Techline.

AFTER REPAIR	Run command AC016 Electrical supply circuits test . Clear the computer fault memory, switch the + after ignition supply off and back on, and run another check with the diagnostic tool .
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Fault finding - Interpretation of faults

DF033 PRESENT OR STORED	FAN ASSEMBLY SUPPLY CIRCUIT CO : Open circuit CC.0 : Short circuit to earth
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CO	NOTES	Special note: To display this fault as present or stored, run command AC016 Electrical supply circuits test .
		Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check the condition and connection of the **fan assembly** 2-track black connector (tabs broken, bent or oxidised).
If the connector is faulty and there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the connector, otherwise replace the connector.

Check the condition and connection of the 6-track **Protection and Switching Unit MM** connector (tabs broken, bent or oxidised).
If the connector is faulty and there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the connector, otherwise replace the connector.

Check **the insulation, continuity and the absence of interference resistance** on the following connections:
– **49R**, between components **1337** and **188**,
– **49L**, between components **1337** and **1014**,
– **49L**, between components **1337** and **188**.
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.

CC.0	NOTES	To display this fault as present or stored, run command AC016 Electrical supply circuits test .
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Check **the insulation, continuity and the absence of interference resistance** on the following connections:
– **49R**, between components **1337** and **188**,
– **49L**, between components **1337** and **1014**,
– **49L**, between components **1337** and **188**.
If the connection or connections are faulty and there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.

If the fault is still present, contact the Techline.

AFTER REPAIR	Run command AC016 Electrical supply circuits test . Clear the computer fault memory, switch the + after ignition supply off and back on, and run another check with the diagnostic tool .
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<p>DF034 PRESENT OR STORED</p>	<p><u>ALTERNATOR TYPE</u> 1.DEF: Inconsistency</p>
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<p>NOTES</p>	<p>Special note: After 10 minutes with the engine running, deal with fault DF007 UPC-alternator connection first if it is present or stored.</p>
	<p>Conditions for applying the fault finding procedure to stored faults: The fault is declared present with the engine running.</p>

<p>Note the part number of the Protection and Switching Unit LC001, Configurations and programming. Note the part number of the alternator (information found on the rear alternator face).</p>
<p>Contact the Techline.</p>

<p>AFTER REPAIR</p>	<p>Clear the computer fault memory, switch the + after ignition supply off and back on, and run another check with the diagnostic tool.</p>
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Fault finding - Interpretation of faults

DF035 PRESENT OR STORED	<u>COMPUTER SUPPLY VOLTAGE</u> 1.DEF : Voltage too low
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NOTES	The fault is declared present after: A drop in the UPC feed voltage to less than 8 V for longer than 10 seconds .
	The fault is declared stored following: A drop in the UPC feed voltage to less than 8 V for longer than 10 seconds followed by a rise in the voltage to more than 8 V .

Contact the Techline.

AFTER REPAIR	Clear the computer fault memory, switch the + after ignition supply off and back on, and run another check with the diagnostic tool .
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DF036 PRESENT OR STORED	<u>STEERING COLUMN LOCK SUPPLY CIRCUIT</u> CC.0 : Short circuit to earth
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CC.0	NOTES	Special note: To display this fault as present or stored, run command AC016 Electrical supply circuits test.
		Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check that the UPC fuse F11 (15A) is sound.
Check the insulation, continuity and the absence of interference resistance on the following connection: – APCB , between components 1337 and 645 . If the connection is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
If the fault is still present, contact the Techline.

AFTER REPAIR	Run command AC016 Electrical supply circuits test . Clear the computer fault memory, switch the + after ignition supply off and back on, and run another check with the diagnostic tool .
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NOTES	Only carry out this conformity check after a complete check with the diagnostic tool (fault reading and configuration checks). Application conditions: engine stopped, + after ignition feed on.
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MAIN SCREEN

Function	Parameter or Status Check or Action	Display and Notes	Fault finding
Battery voltage	PR004: Battery voltage	11 V < X < 13.5 V (engine running: X < 15.8 V)	In the event of a fault, refer to the interpretation of parameter PR004 .
Reverse gear	ET004: Reverse gear engaged	YES NO	In the event of a fault, refer to the interpretation of status ET004 .
Oil pressure	ET027: Oil pressure contact	OPEN CLOSED	None.
+ 12 V after ignition feed	ET003: + 12 V after ignition feed relay control	INACTIVE ACTIVE	None.
Starting	ET062: UCH request to injection or Protection and Switching Unit	ENGINE OFF INACTIVE + APC STARTING	In the event of a fault, consult the interpretation of status ET062 .

USM_V48_CCONF/USM_V4C_CCONF

NOTES	<p>Only carry out this conformity check after a complete check with the diagnostic tool (fault reading and configuration checks).</p> <p>Application conditions: engine stopped, + after ignition feed on.</p>
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KEYLESS VEHICLE

SUB-FUNCTION: STARTING

Function	Parameter or Status Check or Action	Display and Notes	Fault finding
Reverse gear	ET004: Reverse gear engaged	YES NO	In the event of a fault, refer to the interpretation of status ET004.
Manual gearbox lever position	ET005: Manual gearbox lever position	NOT IN NEUTRAL NEUTRAL	Normal statuses.
		UNAVAILABLE INVALID	In the event of a fault, refer to the interpretation of status ET004.
Starting conditions met	ET010: Starting conditions met	STATUS 1 STATUS 2 STATUS 3	In the event of a fault, consult the interpretation for status ET010.
		YES	Normal status.
+ 12 V after ignition feed relay control	ET003: + 12 V after ignition feed relay control	INACTIVE ACTIVE	In the event of a fault, consult the interpretation of fault DF032.

NOTES	Only carry out this conformity check after a complete check with the diagnostic tool (fault reading and configuration checks). Application conditions: engine stopped, + after ignition feed on.
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FUNCTION: AIR CONDITIONING

SUB-FUNCTION: HEATING

Function	Parameter or Status Check or Action	Display and Notes	Fault finding
Alternator charge	PR010: Alternator charge	0 < X < 99.6% With the engine running, activate the heated rear screen and check that the value increases.	In the event of a fault, consult the interpretation of parameter PR010.
Rear screen de-icer	AC011: Rear screen de-icer	This command supplies the rear screen and door mirror heating resistors, if fitted to the vehicle. They should be warm.	In the event of a fault, apply the procedure for dealing with command AC011.

NOTES

Only carry out this conformity check after a complete check **with the diagnostic tool** (fault reading and configuration checks).

Application conditions: engine stopped, + after ignition feed on.

FUNCTION: AIR CONDITIONING**SUB-FUNCTION: COLD LOOP**

Function	Parameter or Status Check or Action	Display and Notes	Fault finding
Compressor control	AC008: Compressor control	You should be able to hear the compressor clutch (stops the motor running).	In the event of a fault, apply the procedure for dealing with command AC008 .
Fan assembly	AC009: Low-speed fan assembly	This command is used to activate the fan assembly at low speed.	In the event of a fault, apply the procedure for dealing with command AC009 .
	AC010: High-speed fan assembly	This command is used to activate the engine cooling fan at high speed.	In the event of a fault, apply the procedure for dealing with command AC010 .
Low-speed engine fan assembly relay control	ET014: Low-speed engine fan assembly relay control	INACTIVE ACTIVE	In the event of a fault, consult the interpretation for status ET014 .
High-speed engine fan assembly relay control	ET013: High-speed engine fan assembly relay control	INACTIVE ACTIVE	In the event of a fault, consult the interpretation for status ET013 .

NOTES

Only carry out this conformity check after a complete check **with the diagnostic tool** (fault reading and configuration checks).

Application conditions: engine stopped, + after ignition feed on.

FUNCTION: WIPING**SUB-FUNCTION: WIPER POWER**

Function	Parameter or Status Check or Action	Display and Notes	Fault finding
Wiper	AC005: Low-speed windscreen wiper	This command is used to activate the windscreen wiper motor at low speed.	In the event of a fault, apply the procedure for dealing with commands AC005 and AC006 .
	AC006: High-speed windscreen wiper	This command is used to activate the windscreen wiper motor at high speed.	
Windscreen wiper protection	ET002: Windscreen wiper protection	INACTIVE	In the event of a fault, refer to the interpretation for status ET002 .
Windscreen wiper park position	ET018: Windscreen wiper park position	PRESENT (if the wiper is not active) ABSENT	In the event of a fault, refer to the interpretation of status ET018 .
Headlight washer	AC013: Headlight washer relay	This command is used to activate the headlight washers relay on the right and left-hand side alternately.	In the event of a fault, apply the procedure for dealing with command AC013 .

NOTES	Only carry out this conformity check after a complete check with the diagnostic tool (fault reading and configuration checks). Application conditions: engine stopped, + after ignition feed on.
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FUNCTION: LIGHTING

SUB-FUNCTION: LIGHTING POWER

Function	Parameter or Status Check or Action	Display and Notes	Fault finding
Side lights	AC003: Side lights	This command switches on the side lights.	In the event of a fault, apply the procedure for dealing with command AC003.
Dipped headlights	AC002: Dipped headlights	This command switches on the dipped beam headlights.	In the event of a fault, apply the procedure for dealing with command AC002.
Main beam headlights	AC001: Main beam headlights	This command switches on the main beam headlights.	In the event of a fault, apply the procedure for dealing with command AC001.
Front fog lights	AC004: Front fog lights	This command switches on the front fog lights.	In the event of a fault, apply the procedure for dealing with command AC004.

NOTES	Only carry out this conformity check after a complete check with the diagnostic tool (fault reading and configuration checks). Application conditions: engine running.
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FUNCTION: CHARGE CIRCUIT

SUB-FUNCTION: ALTERNATOR

Function	Parameter or Status Check or Action	Display and Notes	Fault finding
Alternator fault	ET023: Alternator thermal fault	ABSENT	In the event of a fault, consult the interpretation of status ET023 Alternator thermal fault.
Alternator charge	PR010: Alternator charge	0 < X < 99.6% Activate the heated rear screen and check that the value increases.	Apply the procedure for PR010 Alternator charge.
Alternator regulation	AC014: Alternator regulation	Run this command with the engine running. When the command is run, the Protection and Switching Unit sets a regulation voltage setpoint for the alternator: – Alternator voltage = 15 V for 30 seconds. – Alternator voltage = 13 V for 30 seconds.	Apply the procedure for dealing with command AC014.

NOTES	Only carry out this conformity check after a complete check with the diagnostic tool (fault reading and configuration checks). Application conditions: engine stopped, + after ignition feed active.
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FUNCTION: CHARGE CIRCUIT

SUB-FUNCTION: BATTERY

Function	Parameter or Status Check or Action	Display and Notes	Fault finding
Voltages	PR004: Battery voltage	11 < X < 13.5 V engine running < 15.8 V	In the event of a fault, apply the procedure for dealing with PR004 Battery voltage .
	PR008: Battery voltage after rest	12.2 V < X <13.5 V	In the event of a fault, apply the procedure for dealing with PR008 Battery voltage after rest .

ENGINE COMPARTMENT CONNECTION UNIT
Fault finding - Status summary table

Tool status	Diagnostic tool title
ET002	Windscreen wiper protection
ET003	+ 12 V after ignition feed relay control
ET004	Reverse gear engaged
ET005	Manual gearbox lever position
ET010	Starting conditions met
ET013	High-speed engine fan assembly relay control
ET014	Low-speed engine fan assembly relay control
ET018	Windscreen wiper park position
ET023	Alternator thermal fault
ET027	Oil pressure contact
ET062	UCH request to injection or Protection and Switching Unit

ET002	<u>FRONT WIPER PROTECTION</u>
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NOTES	Special notes: Only apply the checks if the status is ACTIVE or BLOCKED . If the status is ACTIVE , this indicates that after a wiping request, the Protection and Switching Unit has detected abnormal operation for more than 6 seconds (constrained or blocked). If the status is BLOCKED , this means that the total duration of intermittent pauses is greater than 2 minutes . The status returns to INACTIVE as soon as the UCH requests another wiping setpoint (wiper control adjusted, or request by the rain sensor).
	Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Make sure that **nothing is mechanically blocking** the movement of the **wiper arms** (blades stuck, condition and assembly of the wiper mechanism linkage and that there are no objects that could impede the movement of the mechanism).

Check that the **wiper** mechanism is **not seized**.

Repair if necessary.

Check the condition and connection of **connectors CT1 and CN on the Protection and Switching Unit, component code 1337**.

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

Check the condition and connection of the **windscreen wiper motor** connector, **component code 212**.

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

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

- **14M** between components **1337** and **212**,
- **14L** between components **1337** and **212**,
- **14K** between components **1337** and **212**.

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.

If the fault is still present, contact the Techline.

AFTER REPAIR	Repeat the conformity check from the start.
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ET004	<u>REVERSE GEAR ENGAGED</u>
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NOTES	Special notes: Only apply the checks with the ignition switched on and when no faults are present.
	Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

5- and 6-speed manual gearbox
Check the condition and connection of the connector of the reverse gear switch, component code 155, the manual gearbox neutral/reversing lights sensor, component code 1109, and UPC connector MN, component code 1337. If the connector is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the connector, otherwise replace the connector.
With the ignition on and reverse gear engaged, check for + 12 V on connection codes H66P and AP11 of Protection and Switching Unit connector MN, component code 1337. If the connection is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
Check the insulation, continuity and the absence of interference resistance on the following connections: – AP11 between components 1337 and 1109 , – H66P between components 1337 and 1109 . Reverse gear engaged: – between AP11 and H66P on component 155 . 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.
If the fault is still present, contact the Techline.

AFTER REPAIR	Repeat the conformity check from the start.
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ET004
CONTINUED

Automatic gearbox

Check the condition and connection of the connector of the **reverse gear switch component code 155**, the **multifunction switch component code 485** and the **UPC connector MN component code 1337**.
If the connector is faulty and there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the connector, otherwise replace the connector.

With the ignition on and reverse gear engaged, check for **+ 12 V** on **connection codes H66P and AP11** of **Protection and Switching Unit connector MN, component code 1337**.
If the connection is faulty and there is a repair procedure (see **Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair**), repair the wiring, otherwise replace it.

Check the **insulation, continuity and the absence of interference resistance** on the following connections:
– **AP11** between components **1337** and **485**,
– **H66P** between components **1337** and **485**.
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.

If the fault is still present, contact the Techline.

AFTER REPAIR

Repeat the conformity check from the start.

ET010

STARTING CONDITIONS MET**NOTES****Special notes:**

Apply the checks if the status is at **STATUS 1**, **STATUS 2** or **STATUS 3** or **YES**, with the ignition on.

STATUS 1

The **UCH** is preventing the Protection and Switching Unit from activating the starter.
Run fault finding on this computer (see **87B, Passenger compartment connection unit, UCH Vdiag No.: 44, 48, 4C, 4D, 4F, 50**).

STATUS 2

The **injection** is preventing the Protection and Switching Unit from running the starter.
Run fault finding on this computer (see **13B, Diesel injection** and **17B, Petrol injection**).

STATUS 3

The **automatic gearbox** computer is preventing the Protection and Switching Unit from running the starter.
Make sure that the selector lever is in position **P** or **N**.
Run fault finding on this computer (see **23A, Automatic gearbox**).

YES

If the conditions are met and the **starter** does not operate, see **16A, Starting - Charging, Starter**.

If the fault is still present, contact your Techline.

AFTER REPAIR

Repeat the conformity check from the start.

ET023	<u>ALTERNATOR THERMAL FAULT</u>
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NOTES	Special notes: Apply the checks if the status is PRESENT with the engine running.
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Switch off the engine.

Check the general condition of **the alternator**:

Make sure that there are no foreign bodies that could impair the alternator cooling.

Clean **the alternator** if necessary.

With the engine stopped, let the **alternator** cool down with the bonnet open for **at least 1 hour**.

Start the engine with the bonnet closed.

Switch on the main beam headlights and the electrical heated rear screen.

If the status becomes **PRESENT** again, **replace the alternator** (see **MR 364** or **MR 370 Mechanical, 16A, Starting - Charging, Alternator: Removal - Refitting**).

AFTER REPAIR	Repeat the conformity check from the start.
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ET062	<u>UCH REQUEST TO INJECTION COMPUTER OR PROTECTION AND SWITCHING UNIT</u>
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NOTES	Special notes: There must be no present or stored faults.
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This status gives information about the type of request made by the **UCH** to the injection computer or **Protection and Switching Unit**.

ET062:

ENGINE STOP: when an engine stop is requested.

INACTIVE: no action on the vehicle.

+ AFTER IGNITION FEED: pressing the start button for more than **5 seconds**.

STARTING: when starting is requested.

If the status does not correspond to the user's current request, refer to the interpretation of **ET110 REQUEST FROM UCH TO INJECTION OR UPC** of the UCH (see **MR 87B, Interpretation of statuses**).

AFTER REPAIR	Repeat the conformity check from the start.
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Tool parameter	Diagnostic tool title
PR004	Battery voltage
PR008	Battery voltage after rest
PR010	Alternator charge

PR004	<u>BATTERY VOLTAGE</u>
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NOTES	<p>Special notes:</p> <p>Check that all of the electrical consumers are switched off:</p> <ul style="list-style-type: none"> – Passenger compartment blower unit stopped. – Radio off (and Radio navigation system if fitted to the vehicle). – Interior lights off.
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If fault **DF013 Voltage regulation** is not present (or stored):
 With the engine stopped and no electrical consumers operating for **5 minutes**.
 Check the battery, see **TEST3 Battery status test**.

If fault **DF013 Voltage regulation** is present:
 With the engine running at idle speed, and electrical consumers activated:

- Dipped headlights and side lights.
- Electric heated rear screen.
- Passenger compartment blower unit in maximum position.

Check the consistency between the battery voltage measurement from the multimeter and the value of **PR004 Battery voltage**.
 If the difference is greater than **1 V** check the conformity of the **Protection and Switching Unit** supply circuit and the charging circuit wiring **TEST2 Wiring test**.
 Repair if necessary, otherwise replace the **Protection and Switching Unit** (see **Replacement of components**).

AFTER REPAIR	Repeat the conformity check from the start.
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PR008	<u>BATTERY VOLTAGE AFTER REST</u>
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NOTES	<p>Special notes: This value can only be interpreted after the engine and electrical consumers have been stopped for at least 8 hours. Apply if the Charge battery message is displayed on the instrument panel.</p>
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Recharge the battery (see **Technical Note 6512A, Charging**).
 Check the battery (see **80A, Battery**).

AFTER REPAIR	Repeat the conformity check from the start.
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PR010	<u>ALTERNATOR CHARGE</u>
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NOTES	If fault DF007 UPC-alternator connection is declared present, deal with this fault first.
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Start the engine and let it idle for **5 minutes**.
Check that the fan units are not running.
Without any electrical consumers switched on, check the value of **PR010 Alternator charge**.

PR010 decreases and is < 50 % after a few minutes.

"YES"	<p>No interfering consumer is disturbing vehicle operation.</p> <ul style="list-style-type: none"> – Switch on the electric heated rear screen and the main beam headlights. – Wait 20 seconds and then check that PR010 Alternator charge has increased but remains less than 90%. <p>If PR010 Alternator charge remains stuck at 99.6%, replace the alternator (see MR 364 or MR 370 Mechanical, 16A, Starting - Charging, Alternator: Removal - Refitting).</p>
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"NO"	<p>PR010 remains > 50% after 20 minutes.</p> <ul style="list-style-type: none"> – See 16A, Starting - Charging, Alternator output.
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AFTER REPAIR	Repeat the conformity check from the start.
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Tool command	Diagnostic tool title
AC001	Main beam headlights
AC002	Dipped headlights
AC003	Side lights
AC004	Front fog lights
AC005	Low-speed windscreen wiper
AC006	High-speed windscreen wiper
AC008	Compressor control
AC009	Low-speed fan assembly
AC010	High-speed fan assembly
AC011	Rear screen de-icer
AC013	Headlight washers relay
AC014	Alternator regulation
AC016	Test electrical supply circuits

AC001	<u>MAIN BEAM HEADLIGHTS</u>
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NOTES	Special notes: Check the condition and connections of fuses 6 (10A) and 7 (10A) on the Protection and Switching Unit. Replace them if necessary. Check the condition and connections of the bulbs. Replace them if necessary.
	Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check the condition and connection of the headlights, component codes 226 and 227 (tabs bent, broken or oxidised). 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 connector.
Check for earth, connection code MAS for the headlights, component codes 226 and 227 . If the connection is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
Check for + 12 V on headlight connection codes RPD and RPG whilst running the command. 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.
Check the condition and connection of the Protection and Switching Unit 8-track AN connector, connection code 1337 (tabs broken, bent or oxidised). If the connector is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the connector, otherwise replace the connector.
Check the insulation, continuity and the absence of interference resistance on the following connections: – RPD , between components 1337 and 226 , – RPG between components 1337 and 227 . 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.
If the fault is still present, contact Techline.

AFTER REPAIR	Repeat the conformity check from the start.
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AC002	<u>DIPPED HEADLIGHTS</u>
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NOTES	Special notes: Check the condition and connections of fuses 3 (10A) and 4 (10A) on the Protection and Switching Unit. Replace them if necessary. Check the condition and connections of the bulbs. Replace them if necessary.
	Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check the condition and connection of the headlights, component codes 226 and 227 (tabs bent, broken or oxidised). 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 connector.
Check for earth, connection code MAS for the headlights, component codes 226 and 227 . If the connection is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
Check for + 12 V on headlight connection codes CPD and CPG whilst running the command. If the connection is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
Check the condition and connection of the Protection and Switching Unit 8-track AN connector, connection code 1337 (tabs broken, bent or oxidised). If the connector is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the connector, otherwise replace the connector.
Check the insulation, continuity and the absence of interference resistance on the following connections: – CPD , between components 1337 and 226 , – CPG between components 1337 and 227 . 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.
If the fault is still present, contact Techline.

AFTER REPAIR	Repeat the conformity check from the start.
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AC003	<u>SIDE LIGHTS</u>
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NOTES	Special notes: Check the condition and connections of fuses 1 (7.5A) and 2 (7.5A) on the Protection and Switching Unit. Replace them if necessary. Check the condition and connections of the bulbs. Replace them if necessary.
	Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check the condition and connection of the headlights, component codes 226 and 227 (tabs bent, broken or oxidised). 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 connector.
Check for earth, connection code MAS for the headlights, component codes 226 and 227 . If the connection is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
Check for + 12 V on side light connection codes LPD and LPG whilst running the command. If the connection is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
Check the condition and connection of the Protection and Switching Unit 8-track AN connector, connection code 1337 (tabs broken, bent or oxidised). If the connector is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the connector, otherwise replace the connector.
Check the insulation, continuity and the absence of interference resistance on the following connections: – LPD , between components 1337 and 226 , – LPG , between components 1337 and 227 . 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.
If the fault is still present, contact Techline.

AFTER REPAIR	Repeat the conformity check from the start.
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AC004	<u>FRONT FOG LIGHTS</u>
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NOTES	Special notes: Use this command only for vehicles fitted with front fog lights. Check the condition and connection of fuse 5 (20A) on the Protection and Switching Unit . Replace it if necessary. Check the condition and connection of the bulbs. Replace them if necessary.
	Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check the condition and connection of the fog lights, component codes 176 and 177 (tabs bent, broken or oxidised). 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 connector.
Check for earth connection code MAS on the headlights, component codes 176 and 177 . If the connection is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
Check for + 12 V on connection codes 8E and 8F for the fog lights whilst running the command. If the connection is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
Check the condition and connection of the Protection and Switching Unit 8-track AN connector, connection code 1337 (tabs broken, bent or oxidised). If the connector is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the connector, otherwise replace the connector.
Check the insulation, continuity and the absence of interference resistance on the following connections: – 8E , between components 1337 and 177 , – 8F , between components 1337 and 176 . 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.
If the fault is still present, contact Techline.

AFTER REPAIR	Repeat the conformity check from the start.
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AC005	<u>WINDSCREEN WIPER LOW SPEED</u>
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NOTES	Special notes: Check the condition and connection of fuse 9 (25A) on the Protection and Switching Unit . Replace it if necessary. Check that status ET002 Front wiper protection remains INACTIVE .
	Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check the condition and connection of the wiper motor component code 212 (tabs broken, bent or oxidised). If the connector is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the connector, otherwise replace the connector.
Check for earth connection code MAS on the wiper motor component code 212 . If the connection is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
Check for + 12 V on connection code 14K on the wiper motor whilst running the command. If the connection is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
Check the condition and connection of the Protection and Switching Unit CN connector, connection code 1337 (tabs broken, bent or oxidised). If the connector is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the connector, otherwise replace the connector.
Check the insulation, continuity and the absence of interference resistance on the following connection: – 14K , between components 1337 and 212 . If the connection is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
If the fault is still present, contact Techline.

AFTER REPAIR	Repeat the conformity check from the start.
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AC006	<u>WINDSCREEN WIPER HIGH SPEED</u>
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NOTES	Special notes: Check the condition and connection of fuse 9 (25A) on the Protection and Switching Unit . Replace it if necessary. Make sure that status ET002 Windscreen wiper protection remains INACTIVE .
	Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check the condition and connection of the wiper motor component code 212 (tabs broken, bent or oxidised). If the connector is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the connector, otherwise replace the connector.
Check for earth connection code MAS on the wiper motor component code 212 . If the connection is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
Check for + 12 V on connection code 14L on the wiper motor whilst running the command. If the connection is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
Check the condition and connection of the Protection and Switching Unit CN connector, connection code 1337 (tabs broken, bent or oxidised). If the connector is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the connector, otherwise replace the connector.
Check the insulation, continuity and the absence of interference resistance on the following connection: – 14L , between components 1337 and 212 . If the connection is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
If the fault is still present, contact Techline.

AFTER REPAIR	Repeat the conformity check from the start.
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AC008	<u>COMPRESSOR CONTROL</u>
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NOTES	Special notes: Activating the command with the engine running is prohibited. Check the condition and connection of fuse 22 (10A) on the Protection and Switching Unit .
	Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check the condition and connection of the air conditioning compressor component code 171 (tabs bent, broken or oxidised). If the connector is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the connector, otherwise replace the connector.
Check for earth connection code MAS on the air conditioning compressor component code 171 . If the connection is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
Check for + 12 V on connection code 38R on the compressor when the command is running. If the connection is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
Check the insulation, continuity and the absence of interference resistance on the following connection: – 38R , between components 1337 and 171 . If the connection is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
If the fault is still present, contact Techline.

AFTER REPAIR	Repeat the conformity check from the start.
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AC009	<u>LOW-SPEED FAN ASSEMBLY</u>
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NOTES	Special notes: Make sure nothing is hindering the rotation of the blades.
	Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check the condition and connection of the **fan assembly** connector, component code 188 (tabs broken, bent or oxidised).

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

Check the condition and connection of the **6-track Protection and Switching Unit MM** connector (tabs broken, bent or oxidised).

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

Check for **earth, connection code M** of the **motor-driven fan assembly, component code 188**.

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

Check for **+ 12 V** on the **motor-driven fan assembly component code 188** when the command is running.

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

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

– **49L**, between components **1337** and **188**.

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

If the fault is still present, contact Techline.

AFTER REPAIR	Repeat the conformity check from the start.
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AC010	<u>HIGH-SPEED FAN ASSEMBLY</u>
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NOTES	Special notes: Make sure nothing is hindering the rotation of the blades.
	Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check the condition and connection of the **fan assembly** connector, component code 188 (tabs broken, bent or oxidised).

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

Check the condition and connection of the **6-track Protection and Switching Unit MM** connector (tabs broken, bent or oxidised).

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

Check for **earth, connection code M** of the **motor-driven fan assembly, component code 188**.

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

Check for **+ 12 V** on the **motor-driven fan assembly component code 188** when the command is running.

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

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

– **49R**, between components **1337** and **188**.

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

If the fault is still present, contact Techline.

AFTER REPAIR	Repeat the conformity check from the start.
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AC011	<u>HEATED REAR SCREEN</u>
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NOTES	Special notes: Check the condition and connection of fuse 23 (30A) on the Protection and Switching Unit . Replace it if necessary.
	Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

REAR SCREEN

Check the condition and connection of the heated rear screen **component code 200** (tabs bent, broken or oxidised).

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

Check that the **resistance of the rear screen** is neither zero nor infinity.

Check that the **earth on connection code MZ** of the heated rear screen **component code 200** is perfect.

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

Check for **+ 12 V** on **connection code 15LP on the rear screen** when the command is running.

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

Check the condition and connection of the 6-track Protection and Switching Unit **CM** connector (tabs broken, bent oxidised).

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

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

– **15LP**, between components **1337** and **200**.

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

If the fault is still present, contact Techline.

AFTER REPAIR	Repeat the conformity check from the start.
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AC013	<u>HEADLIGHT WASHER RELAY</u>
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NOTES	Special notes: Check the condition and connection of fuse 21 (15A) on the Protection and Switching Unit . Replace it if necessary. The headlight washer pump operates if the dipped headlights are lit and the windscreen washer switch is pressed and held .
	Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Check the condition and connection of the headlight washer pump component code 219 (tabs bent, broken or oxidised). If the connector is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the connector, otherwise replace the connector.
Check the condition and connection of the Protection and Switching Unit connector (tabs bent, broken, or oxidised). If the connector is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the connector, otherwise replace the connector.
To check that the pump is working properly, supply the pump's tracks directly in one direction and then the other. If the pump does not rotate, replace it.
Check for + 12 V alternately on connection code 39C of the headlight washer pump connector . If the connection is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
Check the insulation, continuity and the absence of interference resistance on the following connections: – 39A , between components 1337 and 219 , – 39C , between components 1337 and 219 . 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.
If the fault is still present, contact Techline.

AFTER REPAIR	Repeat the conformity check from the start.
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AC014	<u>ALTERNATOR REGULATION</u>
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NOTES	<p>Conditions for the application of the command:</p> <ul style="list-style-type: none">– engine running at idling speed and warm engine,– air conditioning off,– check that the passenger compartment blower unit is not operating.– check that the cooling fan assemblies are not operating,– if fault DF007 UPC-alternator connection is declared present, deal with this fault first,– check the conformity of PR010 Alternator charge (see Interpretation of parameters). <p>Effect of command:</p> <ul style="list-style-type: none">– for 30 seconds, the Protection and Switching Unit sets the alternator a regulation voltage of 15 V ± 0.5,– then for another 30 seconds, the Protection and Switching Unit imposes a regulation voltage of 13 V ± 0.5 on the alternator.
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Switch off all the electrical consumers (fans, main beam headlights, etc.).

Measure the voltage across the alternator terminals, between the **B+** terminal and the alternator chassis **earth**.

Run **AC014 Alternator regulation**.

Wait **20 seconds**,

For **10 seconds** the alternator voltage should be **15 V ± 0.5**.

Wait **20 seconds**,

For **10 seconds** the alternator voltage should be **13 V ± 0.5**.

Switch on the heated rear screen and the main beam headlights.

Run **AC014** again.

Wait **20 seconds**,

For **10 seconds** the alternator voltage should be **15 V ± 0.5**.

Wait **20 seconds**,

For **10 seconds** the alternator voltage should be **13 V ± 0.5**.

If the values obtained are not correct, **replace the alternator** (see **MR 364** or **MR 370 Mechanical, 16A, Starting-Charging, Alternator: Removal - Refitting**).

AFTER REPAIR	Repeat the conformity check from the start.
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AC016	<u>TEST ELECTRICAL SUPPLY CIRCUITS</u>
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NOTES	Special notes: Switch off the ignition.
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This command is used to activate several electrical circuits controlled by the Protection and Switching Unit .
Read the faults.
Deal with present faults,

AFTER REPAIR	Run command AC016 Test electrical supply circuits again.
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NOTES	Run complete fault finding on the multiplex network (see 88B, Multiplex). Run fault finding on the Protection and Switching Unit .
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RECORDED FAULTS

	NO DIALOGUE WITH THE COMPUTER	ALP1
	NO BACKLIGHTING OF THE VARIOUS FUNCTIONS IN THE PASSENGER COMPARTMENT	ALP3

ALP1	No dialogue with the computer
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NOTES	Run a complete multiplex network check using the diagnostic tool . Check the condition and connection of the connectors and fuses on the Protection and Switching Unit .
	Use Wiring Diagrams Technical Note for Mégane II or Scénic II.

Try the tool on another vehicle.
Check the voltage of the battery. Check the condition and connection of the battery fuse box fuses and terminals. Replace the defective fuse. If the connection is defective and there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
Check for + 12 V on the screwed-in power terminal of the Protection and Switching Unit If the connection is defective and there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
Check for earth on connection codes MAS and NAM of connector CM of the Protection and Switching Unit, component code 1337 . If any of the connections are defective and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.
Check for a + 12 V battery on connection code BP32 , + 12 V APC on connection code AP43 and an earth on connection codes NAM and MAM of the diagnostic socket. If any of the connections are defective 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 with the computer is still not possible, contact the Techline.

AFTER REPAIR	Check that no fault is present.
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ALP3	No backlighting of the various functions in the passenger compartment
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NOTES	Make sure that the side lights are working; if not, refer to the procedure for command AC003 Side lights .
	Use Wiring Diagrams Technical Note for Mégane II or Scénic II .

Check the condition and connection of the defective functions. If the connector is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the connector, otherwise replace the connector.		
Check for earth on the defective function(s). 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.		
With the side lights on, check for 12 V on the defective function(s). If correct, replace the defective component. If the connection is faulty and there is a repair procedure (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace it.		
Check the insulation, continuity, and the absence of interference resistance between the defective function and the Protection and Switching Unit:		
Right-hand headlight component code 226 , rear right-hand lights component code 172 , right-hand and left-hand heated seat control component codes 1513 and 1514 , parking distance control switch component code 1540 , cruise control/speed limiter control component code 1081 , ESP on/off button component code 1106 , gear lever display component code 1129 , hard roof switch component code 1482 , simultaneous window control component code 854 , LPG or petrol selector switch component code 1003 , right-hand number plate light component code 166 .	LPD	Connector CN of the Protection and Switching Unit, component code 1337 .
Left-hand rear light component code 173 , left-hand headlight component code 227 , child safety switch component code 135 , CD changer component code 1272 , radio component code 261 , multifunction display component code 653 , headlight adjustment rheostat switch component code 1390 , warning/door locking switch component code 1391 , first cigarette lighter component code 101 .	LPG	Connector CN of the Protection and Switching Unit, component code 1337 .
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.		
If the fault is still present, contact the Techline.		

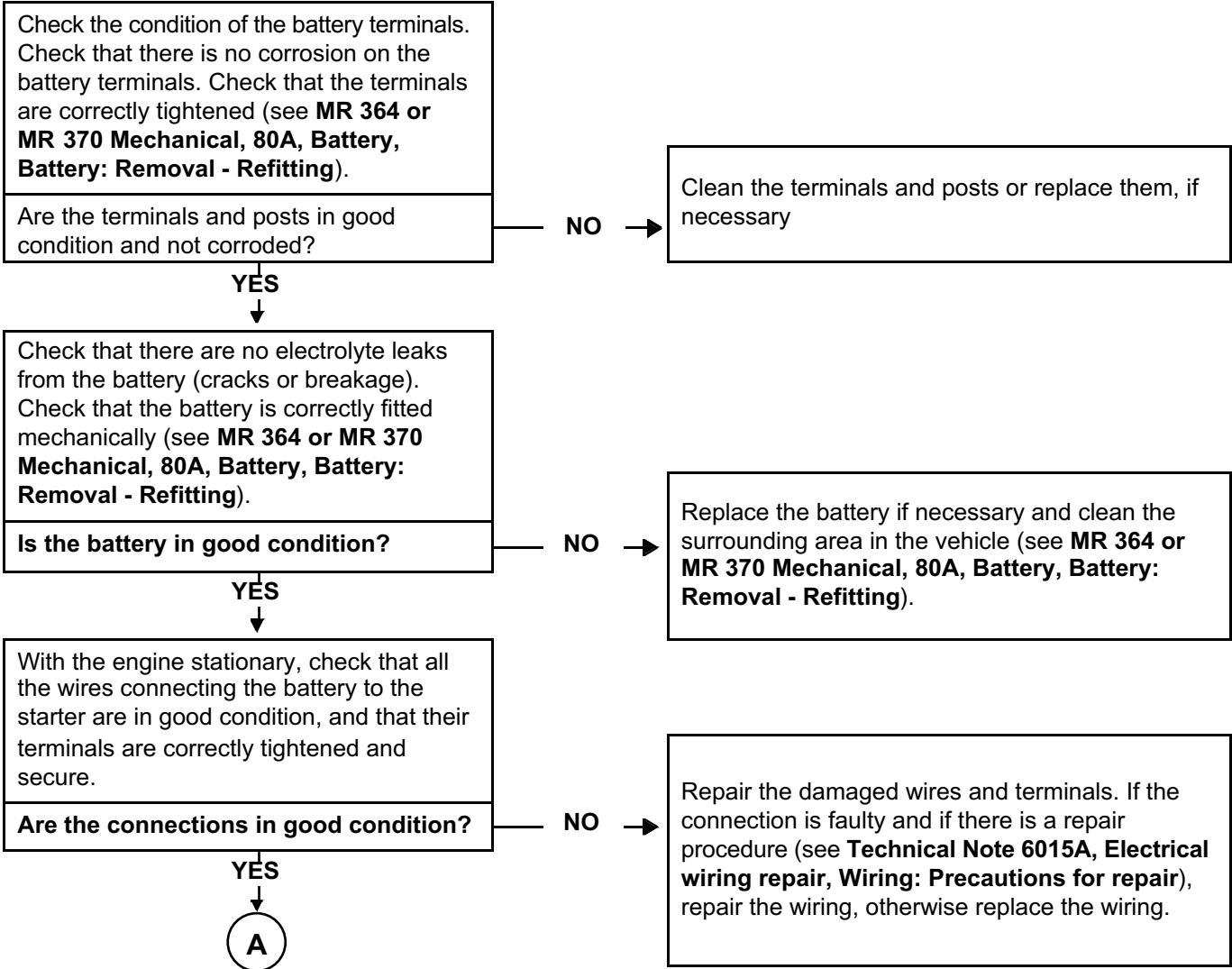
AFTER REPAIR	Check that no fault is present.
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Some specific checks are grouped together into Tests and are performed as required in:

- Introduction.
- Interpretation of faults.
- Interpretation of parameters.



TEST1	Wiring check
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AFTER REPAIR	Carry out a complete check with the diagnostic tool .
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TEST1 CONTINUED	
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