

MEGANE

2 Transmission

23A AUTOMATIC TRANSMISSION

SIEMENS TA2000

Vdiag No.: 10-11-15

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V4

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): **MEGANE II and SCENIC II**
Function concerned: **Automatic transmission**

Name of computer: **Siemens TA 2000**
Vdiag No.: **10-11-15**

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

Special tooling required

Special tooling required	
	Multimeter
Elé. 1681	Universal bornier

3. RECAP

Procedure

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

Proceed as follows:

- Connect the diagnostic tool and perform the required operations.

WARNING

Computer supply for the fault finding procedure:

To run fault finding on the vehicle computers, proceed as follows:

- Renault card on the card holder (keyless vehicle scenario 1 (basic, not hands-free) and scenario 2 (top of the range, hands-free))
- Long press (more than 5 seconds) on Start button without start-up conditions
- Then connect the diagnostic tool and perform the required operations.

Note:

The left and right-hand xenon bulb computers are supplied when the dipped headlights are lit. Therefore fault finding can only be carried out on them after the ignition has been switched on in fault finding mode (forced + after ignition feed) and the dipped headlights have been switched on.

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

- Disconnect the diagnostic tool.
- Press the Start button twice briefly (less than **3 seconds**).
- Ensure that the + after ignition feed has been cut off by checking that the computer indicator lights on the instrument panel have gone out.

Faults

Faults are declared either present or stored (depending on whether they appeared in a certain context and 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 switched on after the + after ignition feed (without any system components being active).

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 for these lines (for oxidation, 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.

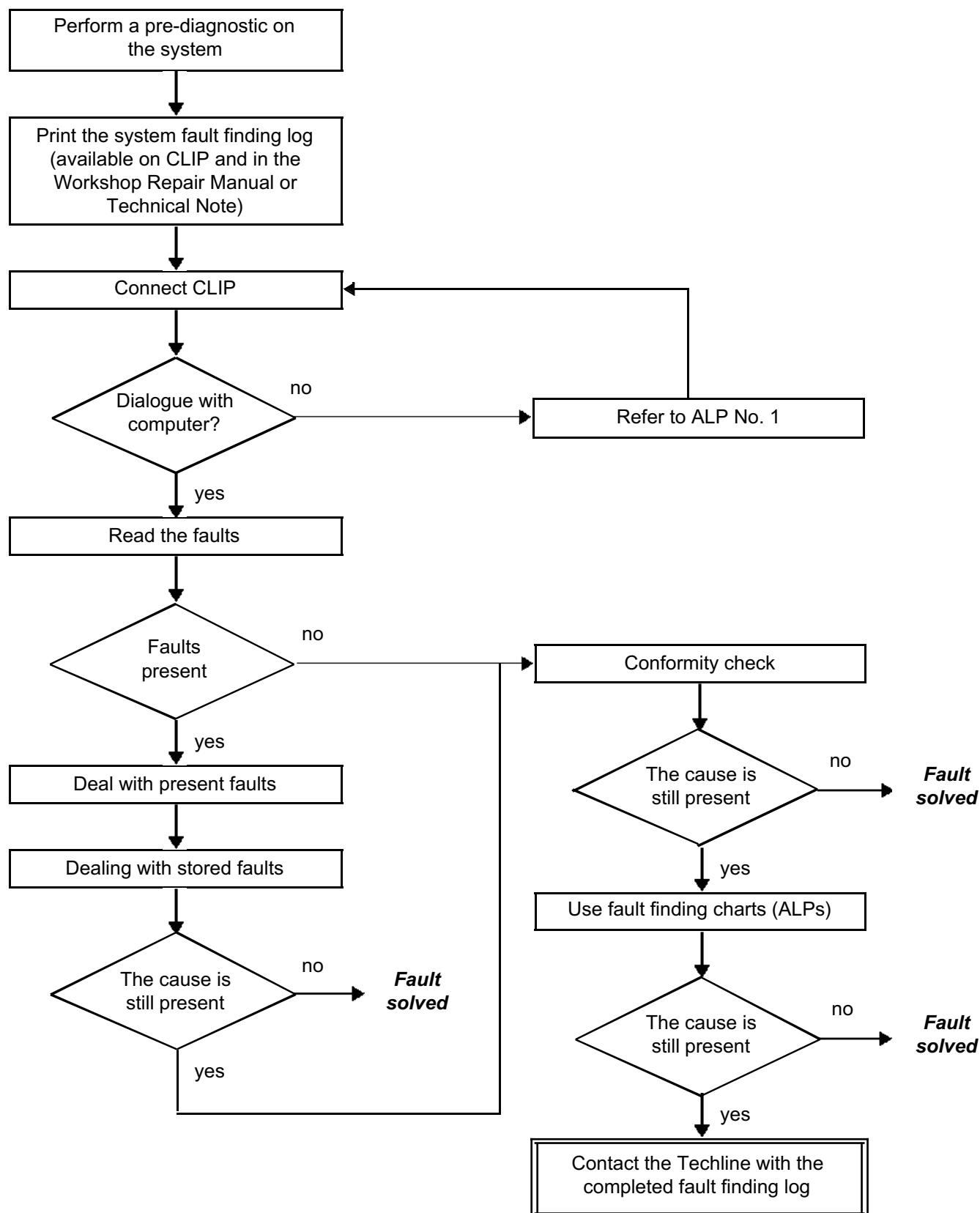
If a status is not behaving normally or a parameter is outside the permitted tolerance values, consult the corresponding fault finding page.

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 processed by **customer complaint**.

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

4. FAULT FINDING PROCEDURE



4. FAULT FINDING PROCEDURE (continued)

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 the voltage, resistance and insulation are generally correct, especially if the fault is not present when analysing (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 or present.

Check that the connectors are correctly 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).

Check that the clips and tabs are correctly locked in the sockets.

Make sure that no clips or tabs have been dislodged during connection.

Check the clip contact pressure using an appropriate model of tab.

Check the continuity/insulation

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 MANDATORY TO FILL OUT A FAULT FINDING LOG
EACH TIME FAULT FINDING IS CARRIED OUT.**

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 the battery voltage to avoid incorrect operation of computer functions,
- use the appropriate tools,
- Immobilise the vehicle for all tests in the workshop on the automatic transmission with the engine running.

GENERAL OPERATION

The automatic transmission on this model is a DP0, which is also found on other Renault vehicles including the Clio II, Kangoo or Megane.

The automatic transmission computer controls gear-shifting based on several parameters, among them engine torque and the type of driving adopted by the driver.

All signals travel to the computer by wire, except for those from the injection computer, which use the multiplex network.

Line K is used for computer diagnostics.

SYSTEM OPERATION

Multifunction switch (CMF) statuses:

Note:
Multifunction switch contact S1 is not connected on this vehicle.
Ignore **ET154 Multifunction switches**.

Lever position	Multifunction switch contact			
	P/N	S2	S3	S4
P	OPEN	OPEN	CLOSED	CLOSED
R	OPEN	OPEN	OPEN	OPEN
N	CLOSED	CLOSED	OPEN	CLOSED
D	CLOSED	CLOSED	CLOSED	OPEN
M	CLOSED	CLOSED	CLOSED	OPEN
+	CLOSED	CLOSED	CLOSED	OPEN
-	CLOSED	CLOSED	CLOSED	OPEN

Sequential lever switch statuses:

Note:
The vehicle does not have a 3rd gear hold (D3).
Ignore **ET155 Third gear hold contact**.

Lever position	Upper sequential lever switch	Lower sequential lever switch
P	ACTIVE	ACTIVE
R	ACTIVE	ACTIVE
N	ACTIVE	ACTIVE
D	ACTIVE	ACTIVE
M	INACTIVE	INACTIVE
+	INACTIVE	ACTIVE
-	ACTIVE	INACTIVE

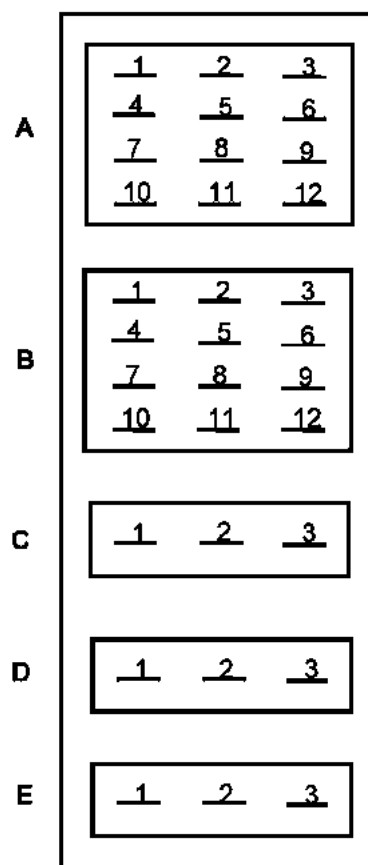
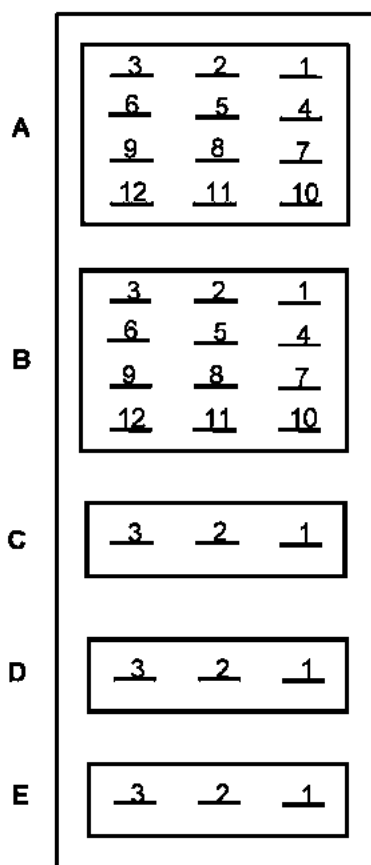
Sequence solenoid valve (EVS) statuses:

Lever position	Gear engaged	Solenoid valve statuses					
		1	2	3	4	5	6
P	Neutral	INACTIVE	INACTIVE	ACTIVE	INACTIVE	INACTIVE	INACTIVE
R	R	INACTIVE	INACTIVE	INACTIVE	INACTIVE	INACTIVE	INACTIVE
N	Neutral	INACTIVE	INACTIVE	ACTIVE	INACTIVE	INACTIVE	INACTIVE
P or N < - 10°C	Neutral	INACTIVE	ACTIVE	INACTIVE	INACTIVE	INACTIVE	INACTIVE
D or M stationary or driving	1	INACTIVE	INACTIVE	ACTIVE	ACTIVE	ACTIVE	INACTIVE
D or M stationary or driving	2	INACTIVE	ACTIVE	INACTIVE	ACTIVE	INACTIVE	INACTIVE
D or M Driving	3	INACTIVE	INACTIVE	INACTIVE	INACTIVE	INACTIVE	INACTIVE
D or M Driving	4	ACTIVE	ACTIVE	INACTIVE	INACTIVE	INACTIVE	INACTIVE

MODULAR CONNECTOR

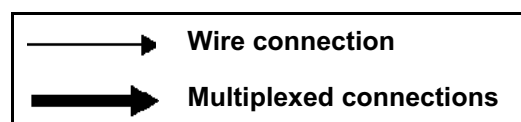
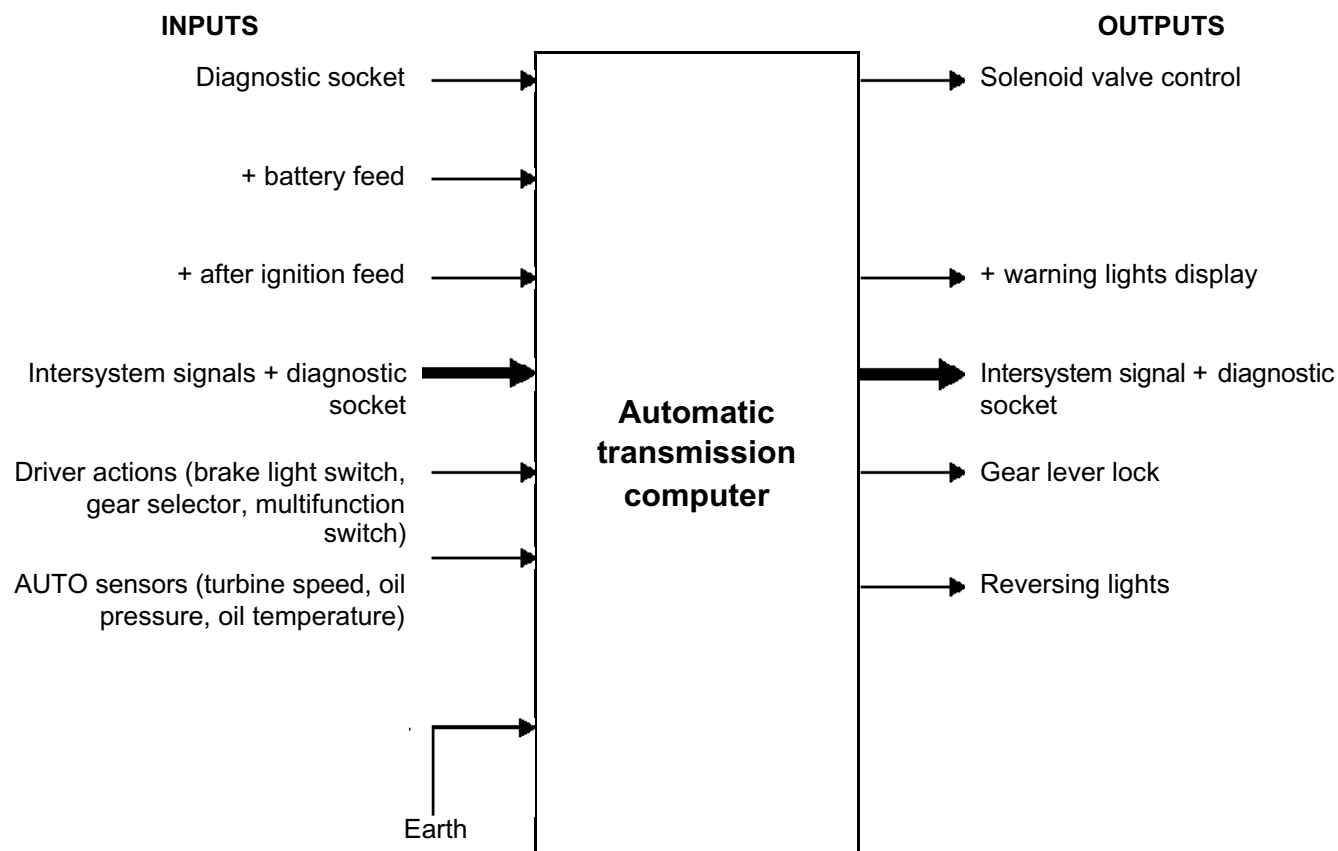
Female connection
(connector leading to switch, interface) sensors,
exchanger flow lock-up solenoid valve)

Male connection
(connector coming from computer)



- A Multifunction switch
- B Hydraulic electronic interface
- C Oil pressure sensor
- D Turbine speed sensor
- E Exchanger flow lock-up solenoid valve

COMPUTER INPUTS AND OUTPUTS



REPLACING THE COMPUTER

IT IS ESSENTIAL TO CONTACT YOUR TECHLINE BEFORE REPLACING AN AUTOMATIC TRANSMISSION COMPUTER.

If Techline approves the computer replacement, proceed as follows:

- Note the gearbox oil condition meter code in the Identification menu: **ID018 Oil condition meter** and the date of the last gearbox oil service **ID017: Gearbox oil service date**.
- Switch off the ignition.
- Replace the computer.
- If necessary, change the computer configuration in the Enter configuration menu.
- Enter the VIN into the computer with diagnostic tool command **VP001 Enter VIN**.
- Enter the oil condition meter code from the old automatic transmission computer (found in the Identification menu) using command **VP015 Transfer oil condition meter**.
- Enter the gearbox oil service date with command **VP016 Enter gearbox oil service date**.
- Enter the After-Sales service date with diagnostic tool command **VP009 Enter last After-Sales service date**,
- Carry out a check with the diagnostic tool, on the Identification screen.
- Switch off the ignition.

REPLACING AN AUTOMATIC TRANSMISSION COMPONENT

For the replacement of the other components which make up the automatic transmission, (see **MR 364 Mechanical, 23A, Automatic transmission (For MEGANE II)** and see **MR 370 Mechanical, 23A, Automatic transmission (For SCENIC II)**).

After the replacement of one or more gearbox components, or after reprogramming, auto-program the solenoid valves using command **RZ005: Self-adapting programs** (see **Dealing with command modes**).

PROGRAMMING

● VP001 Enter VIN:

As it is necessary to enter the VIN each time dialogue is established with the diagnostic tool, it must be programmed into each vehicle computer whenever a computer is replaced.

Programming procedure:

- Connect the diagnostic tool.
- Consult the fault finding procedure for the automatic transmission.
- Select configuration **VP001 Enter VIN**.
- Enter the VIN.
- Exit fault finding mode.
- Switch off the ignition.
- Wait for the end of Power-latch: over 10 seconds.

● VP009 Enter last After-Sales operation date:

Every time work is carried out on the automatic transmission in the workshop, enter the date of the operation.

Select command **VP009 Enter last After-Sales operation date** on the diagnostic tool, then use the tool's keypad to enter the date of the operation.

● VP015 Transfer oil condition meter:

Transfer the oil wear counter code from the old computer.

Select command **VP015 Transfer oil wear counter** on the diagnostic tool, then use the keypad to enter the code found on the replaced computer.

● VP016 Enter gearbox oil service date:

Select command **VP016 Enter gearbox oil service date** on the diagnostic tool, then use the keypad to enter the date found on the replaced computer.

* The immobiliser warning light will flash a few seconds after the ignition is switched off.

For SCENIC II only

Reading automatic transmission configuration

The read-configuration commands (**LCXXX**) are used to display the current computer configuration in relation to the equipment installed in the vehicle.

Configuration reading	Configuration
LC014 Engine torque control function	WITH/WITHOUT
LC015 Electronic stability control	WITH/WITHOUT
LC017 Shift lock connection fault finding	WITH/WITHOUT

Writing automatic transmission configuration

The write-configuration commands (**CFXXX**) are used to configure the computer for the equipment installed in the vehicle.

Configuration reading	Configuration
CF322 Engine torque control function	WITH/WITHOUT
CF314 Electronic stability program (ESP)	WITH/WITHOUT
CF325 Shift lock connection fault finding	WITH/WITHOUT

These three settings are important because they optimise transmission operation for the vehicle. If they are not entered properly, automatic transmission operation may be impaired.

For SCENIC II only

CONFIGURATIONS OF THE AUTOMATIC TRANSMISSION COMPUTER CF322: ENGINE TORQUE CONTROL FUNCTION

- This function reduces engine torque when shifting gears.
- To apply this configuration, the vehicle must have the ignition on, engine stopped and gear lever in position P or N.
- This function tells the computer what torque to apply to the engine when changing gears.
- Select configuration **CF322 "Engine torque control function"**.
- Configure the computer WITH or WITHOUT.
- Exit fault finding mode.
- Switch off the ignition.
- Wait **15 seconds** for the power-latch to end.
- re-read the configuration for confirmation.

CF314 "ELECTRONIC STABILITY PROGRAM (ESP)"

- This function limits over- or under-steering by braking certain wheels and controlling engine torque.
- To apply this configuration, the vehicle must have the ignition on, engine stopped and gear lever in position P or N.
- This function lets the automatic transmission computer downshift for ESP adjustments.
- Select configuration **CF314 "Electronic stability program (ESP)"**.
- Configure the computer WITH or WITHOUT.
- Exit fault finding mode.
- Switch off the ignition.
- Wait **15 seconds** for the power-latch to end.
- re-read the configuration for confirmation.

CF325 "SHIFT LOCK CONNECTION FAULT FINDING"

- To apply this configuration, the vehicle must have the ignition on, engine stopped and gear lever in position P or N.
- Select configuration **CF325 "Shift lock connection fault finding"**.
- Configure the computer WITH or WITHOUT.
- Exit fault finding mode.
- Switch off the ignition.
- Wait **15 seconds** for the power-latch to end.
- re-read the configuration for confirmation.

AUTOMATIC TRANSMISSION

Fault finding – Fault summary table

23A

Tool fault	Diagnostic tool title
DF002	Computer
DF003	Analogue sensor feed
DF005	Oil pressure sensor circuit
DF009	Multifunction switch prohibited position
DF012	Solenoid valve feed
DF016	Lockup solenoid valve circuit
DF017	Exchanger flow rate solenoid valve circuit
DF018	Lockup slip
DF023	Gearbox oil temperature sensor circuit
DF029	Multifunction switch in unstable position
DF036	Pressure regulating solenoid valve circuit
DF038	Turbine speed sensor circuit
DF048	Vehicle speed signal
DF049	Pressure regulation
DF055	Injection → automatic transmission connection
DF064	Display circuit
DF085	EVS*1 sequence solenoid valve circuit
DF086	EVS*2 sequence solenoid valve circuit
DF087	EVS*3 sequence solenoid valve circuit
DF088	EVS*5 sequence solenoid valve circuit
DF089	EVS*4 sequence solenoid valve circuit
DF093	Sequential gear lever circuit
DF095	Shift lock electromagnet circuit
DF109	Engine torque multiplex signal
DF112	*EVS6* sequence solenoid valve circuit
DF114	Pedal position multiplex signal

* EVS: Sequence solenoid valves

AUTOMATIC TRANSMISSION

Fault finding – Fault summary table

Tool fault	Diagnostic tool title
DF116	Engine multiplex speed signal
DF117	Left RR* wheel multiplex speed signal
DF118	Right RR* wheel multiplex speed signal
DF119	Brake pedal position
DF122	Passenger compartment computer connection
DF123	ABS computer connection
DF126	Turbine speed signal
DF131	Slip
DF144	Coolant temperature multiplex signal
DF174	ABS fault detection
DF175	Left-hand FR* wheel multiplex speed signal
DF176	Right-hand FR* wheel multiplex speed signal
DF177	Automatic transmission overheating

* RR: rear

* FR: front

DF002 PRESENT OR STORED	<u>COMPUTER</u>
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NOTES	Conditions for applying the fault finding procedure to stored faults: The fault is declared present after the ignition has been switched on.
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Check that the computer earth is connected correctly to the vehicle's left-hand front side member.
Measure the battery voltage, it should be between 11.8 V and 13.2 V .
Check the cleanliness and condition of the connections. Check the 20A permanent computer feed fuse F15 on connection BP42 in the Protection and Switching Unit. 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 cleanliness and condition of the connections. Check the 5A computer after ignition feed fuse F5H on connection AP4 in the Protection and Switching Unit. 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.
Disconnect the battery. Disconnect the computer. Check the cleanliness and condition of the connections. Disconnect connector PPM2 in the Protection and Switching Unit. Use the Universal bornier Elé. 1681 to check the insulation, continuity and the absence of interference resistance on the following connections: <ul style="list-style-type: none"> ● Connection code BP42 between components 119 and 1337. ● Connection code AP4 between components 119 and 1337. ● Connection code N between components 119 and 107. If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring.
Reconnect the battery. With the ignition on, check for 12 V on component 119, between the following connections: <ul style="list-style-type: none"> ● Connection code BP42. ● Connection code AP42. If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring. If 12 V is not found, there is a failure in the Protection and Switching Unit. Run fault finding on the Protection and Switching Unit.
If the fault is still present, contact the Techline.

DF003 PRESENT OR STORED	<u>ANALOGUE SENSOR SUPPLY</u>
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NOTES	<p>If fault DF002 Computer is present or stored, deal with it first.</p> <p>Conditions for applying the fault finding procedure to stored faults: The fault is declared present after the ignition has been switched on.</p>
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<p>Disconnect the battery.</p> <p>Check the condition and cleanliness of the modular connector connections.</p> <p>Disconnect the computer. Check the cleanliness and condition of the connections.</p>
<p>Check the insulation, continuity and the absence of interference resistance to earth, to + 12 V of the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5U between components 119 and 781. ● Connection code 5V between components 119 and 781. ● Connection code 5BC between components 119 and 754. ● Connection code 5BB, between components 119 and 754. <p>If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring.</p>
<p>Reconnect the modular connector.</p> <p>Measure the resistance of component 781 between the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5U. ● Connection code 5V. <p>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.</p> <p>The value should be approximately 20 kΩ.</p> <p>If the resistance is not correct, either the sensor or the harness is damaged.</p>
<p>Measure the resistance of component 754 between the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5BC. ● Connection code 5BB. <p>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.</p> <p>The resistance should be between 2360 and 2660 Ω at a temperature of approximately 20°C.</p> <p>If the resistance is not correct, either the sensor or the harness is damaged.</p>
<p>If the fault is still present, contact the Techline.</p> <p>If the fault does not disappear, deal with the other faults then go to the conformity check.</p>

AFTER REPAIR	<p>Deal with any other faults. Clear the fault memory.</p> <p>Switch off the ignition and carry out a road test followed by a test with the diagnostic tool.</p>
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<p>DF005 PRESENT OR STORED</p>	<p><u>OIL PRESSURE SENSOR CIRCUIT</u> CO.0 : Open circuit or short circuit to earth</p>
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<p>NOTES</p>	<p>Conditions for applying the fault finding procedure to stored faults: The fault appears after a timed period of 10 seconds with the engine running at 2000 rpm.</p>
	<p>Special notes: Use bornier Elé. 1681 for all operations on the computer connectors.</p>

<p>Disconnect the battery. Disconnect the modular connector, and check the cleanliness and condition of the connections. Disconnect the computer. Check the cleanliness and condition of the connections.</p>
<p>Check the insulation, continuity and the absence of interference resistance to earth, to + 12 V of the following connection:</p> <ul style="list-style-type: none"> ● Connection code 5U between components 119 and 781. ● Connection code 5W between components 119 and 781. ● Connection code 5V between components 119 and 781. <p>If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring. Reconnect the modular connector. Measure the resistance of component 781 between connections 5V and 5W on the computer connector (female connector). 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. Replace the sensor if the resistance is not approximately 20 kΩ.</p>

<p>AFTER REPAIR</p>	<p>Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool.</p>
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DF009 PRESENT OR STORED	<u>MULTIFUNCTION SWITCH IN PROHIBITED POSITION</u>
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NOTES	Conditions for applying the fault finding procedure to stored faults: The fault appears when the selector lever is moved from position P to position D with a stop at each lever position.
	Use Technical Note Wiring diagram, Mégane II

<p>A Check the consistency between: ET012 Gear lever position, the instrument panel display and the gear lever position while shifting the lever into all the possible positions.</p> <p>B To check that there is no clearance between the gearbox output lever and the multifunction switch shaft, see test 1 Checking the gearbox output lever clearance</p> <ul style="list-style-type: none"> – If there is clearance, check the tightness of the retaining nut. If this is ineffective, replace the lever. – If there is no play, go on to the next step. <p>C Adjust the control (see MR 370 Mechanical, 23A Automatic transmission, Automatic transmission control unit (for Mégane II and Scénic II)).</p> <ul style="list-style-type: none"> – If the setting is correct, the procedure is complete. – If the setting is not correct, go on to the next step. <p>D Check the cleanliness, condition and mounting of the multifunction switch. Check the adjustment of the CMF* in neutral (see MR 364 Mechanical, 23A Automatic transmission, Multifunction switch, Removal - Refitting (for Mégane II) and MR 370 Mechanical, 23A Automatic transmission, Multifunction switch, Adjustment (for Scénic II)).</p> <ul style="list-style-type: none"> – If the adjustment is incorrect, adjust the multifunction switch. – If the setting is correct, go on to the next step. <p>E Check the adjustment of the ball detent blade on the gearbox output lever at the unclipped external control (see Technical Note 4194A: Automatic transmission indicator strip flashing):</p> <ul style="list-style-type: none"> – If the adjustment is incorrect, adjust the ball detent blade. – If the check is correct, go on to the electrical check. <p>Repair if necessary.</p> <p>Check the condition and cleanliness of the connector A connections.</p> <p>If the continuity is faulty, change the multifunction switch.</p>	
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*CMF: Multifunction switch

AFTER REPAIR	Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool .
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DF009
CONTINUED 1

Check for **continuity on component 485** between the following connections:

Lever in position P

- Connection codes **5DG** and **5DK** between components **119** and **485**.

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.

Lever in position R

- Connection codes **5DG** and **5DK** between components **119** and **485**.
- Connection codes **5DH** and **5DK** between components **119** and **485**.
- Connection codes **5DJ** and **5DK** between components **119** and **485**.

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.

Lever in position N

- Connection codes **5DH** and **5DK** between components **119** and **485**.

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.

Lever in position D

- Connection codes **5DJ** and **5DK** between components **119** and **485**.

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

AFTER REPAIR

Deal with any other faults. Clear the fault memory.
Switch off the ignition and carry out a road test followed by a test with the **diagnostic tool**.

<p>DF009</p> <p>CONTINUED 2</p>	
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Check the **insulation of component 485** on the following connections:

Lever in position P

- Connection codes **5DH** and **5DK** between components **119** and **485**.
- Connection codes **5DJ** and **5DK** between components **119** and **485**.

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.

Lever in position N

- Connection codes **5DG** and **5DK** between components **119** and **485**.
- Connection codes **5DJ** and **5DK** between components **119** and **485**.

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.

Lever in position D

- Connection codes **5DG** and **5DK** between components **119** and **485**.
- Connection codes **5DH** and **5DK** between components **119** and **485**.

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 insulation is faulty, replace the multifunction switch.

Check the **cleanliness and condition** of the connections.

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

- Connection code **5DG** between components **119** and **485**.
- Connection code **5DH** between components **119** and **485**.
- Connection code **5DJ** between components **119** and **485**.
- Connection code **5DK** between components **119** and **485**.

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

If the fault has still not been solved, deal with the other faults and then proceed to the conformity check.

<p>AFTER REPAIR</p>	<p>Deal with any other faults. Clear the fault memory.</p> <p>Switch off the ignition and carry out a road test followed by a test with the diagnostic tool.</p>
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<p>DF012 PRESENT OR STORED</p>	<p><u>SOLENOID VALVE SUPPLY</u> CO.0 : Open circuit or short circuit to earth CC.1 : Short-circuit to + 12 V</p>
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<p>NOTES</p>	<p>Conditions for applying the fault finding procedure to stored faults: The fault appears after running command AC024 Sequential actuator control.</p>
	<p>Special notes: Use bornier Elé. 1681 for all operations on the computer connectors.</p>

Disconnect the battery.
Disconnect the modular connector, and check the **cleanliness and condition** of the connections.
Disconnect the computer. Check the **cleanliness and condition** of the connections.
Repair if necessary.

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

- Connection code 5AU between components 119 and 754.

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

Reconnect the modular connector.

If the fault is still present, contact the Techline.

<p>AFTER REPAIR</p>	<p>Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool.</p>
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<p>DF016 PRESENT OR STORED</p>	<p><u>LOCKUP SOLENOID VALVE CIRCUIT</u> CO.0 : Open circuit or short circuit to earth CC.1 : Short-circuit to + 12 V</p>
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<p>NOTES</p>	<p>Conditions for applying the fault finding procedure to stored faults: The fault appears after running command AC024 Sequential actuator control.</p>
	<p>Special notes: Use bornier Elé. 1681 for all operations on the computer connectors.</p>

<p>Disconnect the battery. Disconnect the modular connector, and check the cleanliness and condition of the connections. Disconnect the computer. Check the cleanliness and condition of the connections. Repair.</p>
<p>Check the insulation, continuity and the absence of interference resistance to earth, to + 12 V and the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5BX between components 119 and 754. ● Connection code 5BA between components 119 and 754. <p>If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring.</p>
<p>Reconnect the modular connector. Measure the resistance of component 754 between the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5BX. ● Connection code 5BA. <p>If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring. Replace the solenoid valve or the electro-hydraulic interface wiring if the resistance is not 1 Ω ± 0.12 Ω at 20°C.</p>
<p>If the fault is still present, contact the Techline.</p>

<p>AFTER REPAIR</p>	<p>Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool.</p>
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<p>DF017 PRESENT OR STORED</p>	<p><u>EXCHANGER FLOW RATE SOLENOID VALVE CIRCUIT</u></p> <p>CO.0 : Open circuit or short circuit to earth CC.1 : Short-circuit to + 12 V</p>
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<p>NOTES</p>	<p>Conditions for applying the fault finding procedure to stored faults: The fault appears after running command AC024 Sequential actuator control.</p>
	<p>Special notes: Use bornier Elé. 1681 for all operations on the computer connectors.</p>

<p>Disconnect the battery. Disconnect the computer. Check the cleanliness and condition of the connections. Disconnect the modular connector, and check the cleanliness and condition of the connections. Repair.</p>
<p>Check the insulation, continuity and the absence of interference resistance to earth, to + 12 V and the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5DN between components 119 and 1019. ● Connection code 5DD between components 119 and 1019. <p>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 the wiring.</p>
<p>Reconnect the modular connector. Measure the resistance of component 1019 between the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5DN. ● Connection code 5DD. <p>If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring. Replace the exchanger flow solenoid valve or the wiring harness if the resistance is not 40 Ω ± 4 Ω at 20°C.</p>
<p>If the fault is still present, contact the Techline.</p>

<p>AFTER REPAIR</p>	<p>Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool.</p>
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DF018 PRESENT OR STORED	<u>CONVERTER LOCKUP SLIPPAGE</u>
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NOTES	Carry out injection system fault finding and check that it is operating correctly.
	<p>If the following faults are present or stored, deal with them first:</p> <ul style="list-style-type: none"> – DF003 Analogue sensor supply. – DF005 Oil pressure sensor circuit – DF016 Converter lock-up solenoid valve circuit. – DF036 Pressure modulating solenoid valve circuit. – DF038: Turbine speed sensor circuit. – DF049 Gearbox oil pressure regulation. <p>Conditions for applying the fault finding procedure to stored faults: The fault is reported present after driving in fixed 3rd gear with speed stabilisation for more than 3 minutes.</p>

To check that there are no faults with the converter lock-up solenoid valve, use the interpretation of fault DF016 Converter lock-up solenoid valve circuit .
To check that there are no faults with the turbine speed sensor, apply the interpretation of fault DF038 Turbine speed sensor circuit .
<p>Check gearbox oil grade and level.</p> <p>If an operation is necessary (see MR 364 Mechanical, 23A, Automatic transmission, Filling-Levels (for Mégane II) and MR 370 Mechanical, 23A, Automatic transmission, Draining-Filling (for Scénic II)).</p> <p>Check that the transmission is not leaking oil.</p>

AFTER REPAIR	<p>Deal with any other faults. Clear the fault memory.</p> <p>Switch off the ignition and carry out a road test followed by a test with the diagnostic tool.</p>
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DF018 CONTINUED

Carry out a conformity check to detect any possible faults.

Check the setting point of the converter (see **MR 364 Mechanical, 23A, Automatic transmission, Checking the setting point of the converter (for Mégane II and Scénic II)**)

If the setting point value is not correct, carry out the following checks:

- Check the oil pressure using **PR003 Oil pressure**:
- Warm engine with gearbox oil temperature between **65** and **90°C**.
- Take the line pressure reading under the following 3 conditions:

Important

The vehicle must be stationary: handbrake on and brake pedal depressed, no accessories operating (e.g.: air conditioning)

1 Engine speed idling:

Shift the gear lever to R, N and D, the pressure reading must be greater than 2.5 bar.

2 Engine speed at 1200 rpm:

- gear lever in **R** position, the pressure reading must be greater than **4 bars**.
- gear lever in **D** position, the pressure reading in first gear must be greater than **5.5 bars**.

3 Engine speed at 2200 rpm:

- gear lever in **R** position, the pressure reading must be greater than **11 bars**.
- gear lever in **D** position, the pressure reading in first gear must be greater than **11 bars**.

If the line pressure value read under one of these 3 conditions is incorrect, replace the line pressure sensor.

If the line pressures recorded under these 3 conditions are good, then the pressure sensor is operating correctly. Replace the pressure regulating solenoid valve.

If the fault is still present after the pressure regulating solenoid valve has been replaced, replace the hydraulic distributor and during refitting, take into account **Technical Note 4194A Automatic transmission indicator strip flashing** for the adjustment of the ball detent blade.

If the fault is still present, contact the Techline

AFTER REPAIR

Deal with any other faults. Clear the fault memory.
Switch off the ignition and carry out a road test followed by a test with the **diagnostic tool**.

DF023 PRESENT OR STORED	<u>GEARBOX OIL TEMPERATURE SENSOR CIRCUIT</u>
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NOTES	Conditions for applying the fault finding procedure to stored faults: The fault is declared present after a road test.
	Special notes: Use bornier Elé. 1681 for all operations on the computer connectors.

Disconnect the battery. Disconnect the modular connector, and check the cleanliness and condition of the connections. Disconnect the computer. Check the cleanliness and condition of the connections. Repair.
Check the insulation, continuity and the absence of interference resistance to earth, to + 12 V and the following connections: <ul style="list-style-type: none"> ● Connection code 5BC between components 119 and 754. ● Connection code 5BB between components 119 and 754. If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring.
Reconnect the modular connector. Measure the resistance of component 754 between the following connections: <ul style="list-style-type: none"> ● Connection code 5BC. ● Connection code 5BB. If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring. Replace the sensor or the wiring if the resistance is not between: <p style="text-align: center;"> 2360 Ω and 2660 Ω at 20 °C 290 Ω and 327 Ω at 80 °C </p>
If the fault is still present, contact the Techline.

AFTER REPAIR	Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool .
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DF029 PRESENT OR STORED	<u>MULTIFUNCTION SWITCH IN UNSTABLE POSITION</u>
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NOTES	<p>Conditions for applying the fault finding procedure to stored faults: The fault is reported present when the gear lever is shifted from Park to Drive (with a stop at each lever position).</p> <hr/> <p>Special notes: Use bornier Elé. 1681 for all operations on the computer connectors.</p>
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<p>A Check the consistency between: ET012 Gear lever position, the instrument panel display and the gear lever position while shifting the lever into all the possible positions.</p> <p>B To check that there is no clearance between the gearbox output lever and the multifunction switch shaft, see test 1 Checking the gearbox output lever clearance</p> <ul style="list-style-type: none"> – If there is clearance, check the tightness of the retaining nut. If this is ineffective, replace the lever. – If there is no play, go on to the next step. <p>C Adjust the control (see MR 364 Mechanical, 23A Automatic transmission, Automatic transmission control unit (for Mégane II) and MR 370 Mechanical, 23A Automatic transmission, Automatic transmission control unit (for Scénic II)).</p> <ul style="list-style-type: none"> – If the setting is correct, the procedure is complete. – If the setting is not correct, go on to the next step. <p>D Check the cleanliness, condition and mounting of the multifunction switch. Check the adjustment of the CMF* in neutral (see MR 364 Mechanical, 23A Automatic transmission, Multifunction switch, Removal - Refitting (for Mégane II) and MR 370 Mechanical, 23A Automatic transmission, Multifunction switch, Adjustment (for Scénic II)).</p> <ul style="list-style-type: none"> – If the adjustment is incorrect, adjust the multifunction switch. – If the setting is correct, go on to the next step. <p>E Check the adjustment of the ball detent blade on the gearbox output lever at the unclipped external control (see Technical Note 4194A: Automatic transmission indicator strip flashing):</p> <ul style="list-style-type: none"> – If the check is not correct, adjust the locating ball spring. – If the check is correct, go on to the electrical check. <p>Repair if necessary.</p>

*CMF: Multifunction switch

AFTER REPAIR	<p>Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool.</p>
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<p>DF029</p> <p>CONTINUED 1</p>	
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Disconnect the battery.

Disconnect the modular connector and check the **cleanliness and condition** of the connector A connections.

Check the **continuity** of the following connections on the female modular connector:

Lever in position P

- Connection codes **5DG** and **5DK** between components **119** and **485**

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.

Lever in position R

- Connection codes **5DG** and **5DK** between components **119** and **485**
- Connection codes **5DH** and **5DK** between components **119** and **485**
- Connection codes **5DJ** and **5DK** between components **119** and **485**

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.

Lever in position N

- Connection codes **5DH** and **5DK** between components **119** and **485**

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.

Lever in position D

- Connection codes **5DJ** and **5DK** between components **119** and **485**

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 continuity is faulty, change the multifunction switch.

<p>AFTER REPAIR</p>	<p>Deal with any other faults. Clear the fault memory.</p> <p>Switch off the ignition and carry out a road test followed by a test with the diagnostic tool.</p>
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<p>DF029</p> <p>CONTINUED 2</p>	
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Check **the insulation** of the following connections on the female modular connector:

Lever in position P

- Connection codes **5DH and 5DK** between components **119 and 485**.
- Connection codes **5DJ and 5DK** between components **119 and 485**.

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.

Lever in position N

- Connection codes **5DG and 5DK** between components **119 and 485**.
- Connection codes **5DJ and 5DK** between components **119 and 485**.

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.

Lever in position D

- Connection codes **5DG and 5DK** between components **119 and 485**.
- Connection codes **5DH and 5DK** between components **119 and 458**.

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 insulation is faulty, replace the multifunction switch.

Disconnect the computer. Check the **cleanliness and condition** of the connections.

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

- Connection code **5DG** between components **119 and 485**.
- Connection code **5DH** between components **119 and 485**.
- Connection code **5DJ** between components **119 and 485**.
- Connection code **5DK** between components **119 and 485**.

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.

<p>AFTER REPAIR</p>	<p>Deal with any other faults. Clear the fault memory.</p> <p>Switch off the ignition and carry out a road test followed by a test with the diagnostic tool.</p>
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<p>DF036 PRESENT OR STORED</p>	<p><u>PRESSURE MODULATING SOLENOID VALVE CIRCUIT</u></p> <p>CO.0 : Open circuit or short circuit to earth CC.1 : Short-circuit to + 12 V</p>
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<p>NOTES</p>	<p>Conditions for applying the fault finding procedure to stored faults: The fault appears after running command AC024: Sequential control of the actuators.</p>
	<p>Special notes: Use bornier Elé. 1681 for all operations on the computer connectors.</p>

<p>Disconnect the battery. Disconnect the modular connector, and check the cleanliness and condition of the connections. Disconnect the computer. Check the cleanliness and condition of the connections. Repair.</p>
<p>Check the insulation, continuity and the absence of interference resistance to earth, to + 12 V and the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5AZ, between components 119 and 754. ● Connection code 5BA between components 119 and 754. <p>If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring.</p>
<p>Measure the resistance of component 754 between the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5AZ. ● Connection code 5BA. <p>If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring. Replace the solenoid valve or the electro-hydraulic interface wiring if the resistance is not 1 Ω ± 0.2 Ω at 23°C. If the fault is still present, contact the Techline.</p>

<p>AFTER REPAIR</p>	<p>Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool.</p>
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DF038 PRESENT OR STORED	<u>TURBINE SPEED SENSOR CIRCUIT</u>
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NOTES	Conditions for applying the fault finding procedure to stored faults: The fault is declared present when the engine is running and the gear lever is at P .
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Disconnect the battery. Disconnect the modular connector, and check the cleanness and condition of the connections.
Disconnect the computer. Check the cleanliness and condition of the connections. Use the universal bornier Elé. 1681 . Check the continuity and insulation of the following connections: <ul style="list-style-type: none"> ● Connection code 5DA, between components 119 and 1017. ● Connection code 5DB, between components 119 and 1017. If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring.
Reconnect the modular connector. Measure the resistance of component 1017 between the following connections: <ul style="list-style-type: none"> ● Connection code 5DA. ● Connection code 5DB. If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring. The turbine speed sensor resistance is 300 Ω ± 40 Ω at a temperature of approximately 20 °C . If the value is not correct, replace the turbine speed sensor.

AFTER REPAIR	Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool .
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DF048 PRESENT OR STORED	<u>VEHICLE SPEED SIGNAL</u> 1.DEF : No signal
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NOTES	If the following faults: DF117 RR* left-hand wheel speed multiplex signal, DF118 RR* right-hand wheel speed multiplex signal, DF175 FR* left-hand wheel speed multiplex signal, DF176 FR* right-hand wheel speed multiplex signal are present or stored, deal with these first.
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Run a multiplex network test (see 88B, Multiplexing).
If the fault is still present, run fault finding on the Anti-lock braking and Electronic stability program systems (see 38C, Anti-lock braking system).

- * RR: rear
- * FR: front

AFTER REPAIR	Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool .
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<p>DF049 PRESENT OR STORED</p>	<p><u>GEARBOX OIL PRESSURE REGULATION</u> 1.DEF: Pressure regulation</p>
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<p>NOTES</p>	<p>Carry out injection system fault finding and check that it is operating correctly.</p>
	<p>If the following faults are present or stored, deal with them first:</p> <ul style="list-style-type: none"> – DF003 Sensor feeds. – DF005 Oil pressure sensor circuit. – DF023 Gearbox oil temperature sensor circuit. – DF036 Pressure modulating solenoid valve circuit. – DF038: Turbine speed sensor circuit. <p>Conditions for applying the fault finding procedure to stored faults: The fault is declared present after a road test.</p>

<p>To make sure there are no problems with the pressure lock-up solenoid valve, use the interpretation of fault DF036 Pressure regulating solenoid valve circuit.</p>
<p>Check gearbox oil grade and level. If an operation is necessary (see MR 364 Mechanical, 23A, Automatic transmission, Filling-Levels (for Mégane II) and MR 370 Mechanical, 23A, Automatic transmission, Draining-Filling (for Scénic II)). Check that the gearbox is not leaking oil.</p>
<p>Carry out a conformity check to detect any possible faults.</p>

<p>AFTER REPAIR</p>	<p>Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool.</p>
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DF049 CONTINUED

- Check the oil pressure with the engine switched off using **PR003 Oil pressure**: if the pressure is greater than **0.2 bars**, replace the pressure sensor.
- Warm engine with gearbox oil temperature between **65** and **90°C**.
- Take the line pressure reading under the following 3 conditions:

IMPORTANT

The vehicle must be stationary: handbrake on and brake pedal depressed, no accessories operating (e.g.: air conditioning)

1 Engine speed idling:

Shift the gear lever to **R**, **N** and **D**. The pressure reading must be greater than **2.5 bars**.

2 Engine speed at 1200 rpm:

- gear lever in **R** position, the pressure reading must be greater than **4 bars**.
- gear lever in **D** position, the pressure reading in first gear must be greater than **5.5 bars**.

3 Engine speed at 2200 rpm:

- gear lever in **R** position, the pressure reading must be greater than **11 bars**.
- gear lever in **D** position, the pressure reading in first gear must be greater than **11 bars**.

If the line pressure value read under one of these 3 conditions is incorrect, replace the line pressure sensor.

If the line pressures recorded under these 3 conditions are good, then the pressure sensor is operating correctly. Replace the pressure regulating solenoid valve.

If the fault is still present after the pressure regulating solenoid valve has been replaced, replace the hydraulic distributor and during refitting, take into account **Technical Note 4194A Automatic transmission indicator strip flashing** for the adjustment of the ball detent blade.

If the fault is still present, contact the Techline.

AFTER REPAIR

Deal with any other faults. Clear the fault memory.
Switch off the ignition and carry out a road test followed by a test with the **diagnostic tool**.

DF055 PRESENT OR STORED	<u>INJECTION SYSTEM/AUTOMATIC GEARBOX CONNECTION</u> 1.DEF : No signal 2.DEF: Signal interference
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NOTES	None.
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Carry out a test on the multiplex network (see 88B Multiplex).
If the fault is still present, run fault finding on the injection system (see 17B, Petrol injection or 13B, Diesel injection).

AFTER REPAIR	Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool .
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<p>DF064 PRESENT OR STORED</p>	<p><u>DISPLAY CIRCUIT</u> CO.0 : Open circuit or short circuit to earth</p>
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<p>NOTES</p>	<p>None.</p>
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<p>Disconnect the battery. Check the cleanness and condition of the gear lever display connections.</p> <p>Disconnect the computer. Check the cleanliness and condition of the connections. Use the universal bornier Elé. 1681 to check the insulation, continuity and the absence of interference resistance on the following connection:</p> <ul style="list-style-type: none"> ● Connection code 5CQ between components 119 and 1129. <p>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>	
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<p>AFTER REPAIR</p>	<p>Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool.</p>
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<p>DF085 PRESENT OR STORED</p>	<p><u>EVS1 SEQUENCE SOLENOID VALVE CIRCUIT</u></p> <p>CC.0: Short circuit to earth CO : Open circuit CC.1 : Short circuit to +12 V</p>
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<p>NOTES</p>	<p>Deal with fault DF012 Solenoid valves supply first if it is present or stored.</p>
	<p>Conditions for applying the fault finding procedure to stored faults: The fault appears after running command AC024 Sequential actuator control.</p>
	<p>Special notes: Use bornier Elé. 1681 for all operations on the computer connectors.</p>

<p>Disconnect the battery. Disconnect the modular connector, and check the cleanliness and condition of the connections. Disconnect the computer. Check the cleanliness and condition of the connections. Repair if necessary.</p>
<p>Check the insulation, continuity and the absence of interference resistance to earth, to + 12 V and the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5AV between components 119 and 754. ● Connection code 5AU between components 119 and 754. <p>If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring.</p>
<p>Reconnect the modular connector. Measure the resistance of component 754 between the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5AV ● Connection code 5AU. <p>If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring. Replace the solenoid valve or the electric/hydraulic interface wiring harness if the resistance is not 40 Ω ± 2 Ω at 20°C.</p>
<p>If the fault is still present, contact the Techline.</p>

<p>AFTER REPAIR</p>	<p>Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool.</p>
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<p>DF086 PRESENT OR STORED</p>	<p><u>EVS2 SEQUENCE SOLENOID VALVE CIRCUIT</u> CO.0 : Open circuit or short circuit to earth CC.1 : Short circuit to +12 V</p>
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<p>NOTES</p>	<p>Deal with fault DF012 Solenoid valves supply first if it is present or stored. Conditions for applying the fault finding procedure to stored faults: The fault appears after running command AC024 Sequential actuator control.</p>
	<p>Special notes: Use bornier Elé. 1681 for all operations on the computer connectors.</p>

<p>Disconnect the battery. Disconnect the modular connector, and check the cleanliness and condition of the connections. Disconnect the computer. Check the cleanliness and condition of the connections. Repair.</p>
<p>Check the insulation, continuity and the absence of interference resistance on the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5AW between components 119 and 754. ● Connection code 5AU between components 119 and 754. <p>If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring.</p>
<p>Reconnect the modular connector. Measure the resistance of component 754 between the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5AW. ● Connection code 5AU. <p>If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring. Replace the solenoid valve or the electric/hydraulic interface wiring harness if the resistance is not 40 Ω ± 2 Ω at 20°C.</p>
<p>If the fault is still present, contact the Techline.</p>

<p>AFTER REPAIR</p>	<p>Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool.</p>
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DF087 PRESENT OR STORED	<u>EVS3 SEQUENCE SOLENOID VALVE CIRCUIT</u> CO.0 : Open circuit or short circuit to earth CC.1 : Short circuit to +12 V
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NOTES	Deal with fault DF012 Solenoid valves supply first if it is present or stored. Conditions for applying the fault finding procedure to stored faults: The fault appears after running command AC024 Sequential actuator control .
	Special notes: Use bornier Elé. 1681 for all operations on the computer connectors.

Disconnect the battery. Disconnect the modular connector, and check the cleanliness and condition of the connections. Disconnect the computer. Check the cleanliness and condition of the connections. Repair if necessary.
Check the insulation, continuity and the absence of interference resistance on the following connections: <ul style="list-style-type: none"> ● Connection code 5AU between components 119 and 754. ● Connection code 5AX between components 119 and 754. If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring.
Reconnect the modular connector. Measure the resistance of component 754 between the following connections: <ul style="list-style-type: none"> ● Connection code 5AU. ● Connection code 5AX If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring. Replace the solenoid valve or the electric/hydraulic interface wiring harness if the resistance is not 40 Ω ± 2 Ω at 20°C .
If the fault is still present, contact the Techline.

AFTER REPAIR	Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool .
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<p>DF088 PRESENT OR STORED</p>	<p><u>EVS5 SEQUENCE SOLENOID VALVE CIRCUIT</u> CO.0 : Open circuit or short circuit to earth CC.1 : Short circuit to +12 V</p>
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<p>NOTES</p>	<p>Deal with fault DF012 Solenoid valves supply first if it is present or stored. Conditions for applying the fault finding procedure to stored faults: The fault appears after running command AC024 Sequential actuator control.</p>
	<p>Special notes: Use bornier Elé. 1681 for all operations on the computer connectors.</p>

<p>Disconnect the battery. Disconnect the modular connector, and check the cleanliness and condition of the connections. Disconnect the computer. Check the cleanliness and condition of the connections. Repair if necessary.</p>
<p>Check the insulation, continuity and the absence of interference resistance on the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5AU between components 119 and 754. ● Connection code 5DL between components 119 and 754. <p>If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring.</p>
<p>Reconnect the modular connector. Measure the resistance of component 754 between the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5AU. ● Connection code 5DL. <p>If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring. Replace the solenoid valve or the electric/hydraulic interface wiring harness if the resistance is not 40 Ω ± 2 Ω at 20°C.</p>
<p>If the fault is still present, contact the Techline.</p>

<p>AFTER REPAIR</p>	<p>Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool.</p>
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<p>DF089 PRESENT OR STORED</p>	<p><u>EVS4 SEQUENCE SOLENOID VALVE CIRCUIT</u></p> <p>CC.0: Short circuit to earth CO : Open circuit CC.1 : Short circuit to +12 V</p>
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<p>NOTES</p>	<p>Deal with fault DF012 Solenoid valves supply first if it is present or stored. Conditions for applying the fault finding procedure to stored faults: The fault appears after running command AC024 Sequential actuator control.</p>
	<p>Special notes: Use bornier Elé. 1681 for all operations on the computer connectors.</p>

<p>Disconnect the battery. Disconnect the modular connector, and check the cleanliness and condition of the connections. Disconnect the computer. Check the cleanliness and condition of the connections. Repair if necessary.</p>
<p>Check the insulation, continuity and the absence of interference resistance on the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5AU between components 119 and 754. ● Connection code 5AY between components 119 and 754. <p>If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring.</p>
<p>Reconnect the modular connector. Measure the resistance of component 754 between the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5AY. ● Connection code 5AU. <p>If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring. Replace the solenoid valve or the electric/hydraulic interface wiring harness if the resistance is not 40 Ω ± 2 Ω at 20°C.</p>
<p>If the fault is still present, contact the Techline.</p>

<p>AFTER REPAIR</p>	<p>Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool.</p>
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<p>DF093 PRESENT OR STORED</p>	<p><u>MANUAL SEQUENTIAL CONTROLS CIRCUIT</u></p> <p>1.DEF: Inconsistency of the signal CC.0 : Short circuit to earth</p>
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<p>NOTES</p>	<p>Conditions for applying the fault finding procedure to stored faults: The fault appears during a road test when selecting position M with the lever (one-touch control).</p>
	<p>Special notes: Use bornier Elé. 1681 for all operations on the computer connectors.</p>

<p>Disconnect the battery. Disconnect the modular connector, and check the cleanliness and condition of the connections. Disconnect the computer. Check the cleanliness and condition of the connections. Repair if necessary.</p>
<p>Check the insulation, continuity and the absence of interference resistance of the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5FM between components 119 and 129. ● Connection code 5H between components 119 and 129. ● Connection code N, between components 107 and 129. <p>If the connection(s) are faulty and if there is a repair method (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, replace the sequential lever module.</p>

<p>AFTER REPAIR</p>	<p>Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool.</p>
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DF095 PRESENT OR STORED	<u>SELECTOR LEVER LOCK ELECTROMAGNET CIRCUIT</u> CO : Open circuit CC.1 : Short-circuit to + 12 V
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NOTES	Conditions for applying the fault finding procedure to stored faults: The fault is declared present when the gear lever is in position P .
	Special notes: Use bornier Elé. 1681 for all operations on the computer connectors.

Check the cleanliness and condition of the gear lever lock electromagnet connections.
<p>With the ignition on, check for + 12 V, on connection AP43 of component 129.</p> <ul style="list-style-type: none"> – Disconnect the battery. – Check fuse 5F in the Protection and Switching Unit, as well as the cleanliness and condition of the connections. – Disconnect connector PPH2 in the Protection and Switching Unit. – Check the cleanliness and condition of the connections. <p>Use the Universal bornier Elé. 1681. To check the insulation to earth and the continuity of the following connection:</p> <ul style="list-style-type: none"> ● Connection code AP43, between components 129 and 1337. <p>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>With the ignition on, + 12 V is not present on connection AP43 of component 129, run fault finding on the Protection and Switching Unit.</p>
<p>Disconnect the battery.</p> <p>Disconnect the computer. Check the cleanliness and condition of the connections.</p> <p>Use the universal bornier Elé. 1681. Check the continuity and insulation of the following connection:</p> <ul style="list-style-type: none"> ● Connection code 5DU, between components 119 and 129. <p>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>Repair if necessary.</p>
<p>Measure the resistance of component 129 between the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5DU. ● Connection code AP43. <p>If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring.</p> <p>The resistance should be 40 Ω ± 4 Ω at a temperature of approximately 20°C.</p> <p>Otherwise replace the gear lever lock electromagnet.</p>
<p>If the fault is still present, contact the Techline.</p>

AFTER REPAIR	Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool .
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<p>DF109 PRESENT OR STORED</p>	<p><u>ENGINE TORQUE MULTIPLEX SIGNAL</u></p> <ul style="list-style-type: none"> 1.DEF: Consistency 2.DEF: Real torque 3.DEF: Anticipated torque 4.DEF: Torque excluding reduction 5.DEF: Requested torque cannot be attained
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<p>NOTES</p>	<p>None.</p>
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<p>Run a multiplex network test (see 88B, Multiplex).</p>	
<p>If the fault is still present, carry out fault finding on the injection system (see 17B, Petrol injection or 13B, Diesel injection).</p>	
<p>If the fault is still present, contact the Techline.</p>	

<p>AFTER REPAIR</p>	<p>Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool.</p>
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<p>DF112 PRESENT OR STORED</p>	<p><u>EVS6 SEQUENCE SOLENOID VALVE CIRCUIT</u></p> <p>CO.0 : Open circuit or short circuit to earth CC.1 : Short-circuit to + 12 V CC : Short circuit</p>
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<p>NOTES</p>	<p>Deal with fault DF012 Solenoid valves supply first if it is present or stored. Conditions for applying the fault finding procedure to stored faults: The fault appears after running command AC024 Sequential actuator control.</p>
	<p>Special notes: Use bornier Elé. 1681 for all operations on the computer connectors.</p>

<p>Disconnect the battery. Disconnect the modular connector, and check the cleanliness and condition of the connections. Disconnect the computer. Check the cleanliness and condition of the connections. Repair if necessary.</p>
<p>Check the insulation, continuity and the absence of interference resistance to earth, to + 12 V and the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5AU between components 119 and 754. ● Connection code 5DM between components 119 and 754. <p>If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring.</p>
<p>Reconnect the modular connector. Measure the resistance of component 754 between the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5DM. ● Connection code 5AU. <p>If the connection(s) are faulty and if there is a repair method (see Technical Note 6015A, Electrical wiring repair, Wiring: Precautions for repair), repair the wiring, otherwise replace the wiring. Replace the solenoid valve or the electric/hydraulic interface wiring harness if the resistance is not 40 Ω ± 2 Ω at 20°C.</p>
<p>If the fault is still present, contact the Techline.</p>

<p>AFTER REPAIR</p>	<p>Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool.</p>
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DF114 PRESENT OR STORED	<u>MULTIPLEX PEDAL POSITION</u>
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NOTES	None.
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Carry out a test on the **multiplex network** (see **88B Multiplex**).

If the fault is still present, run fault finding on the **injection system** (see **17B, Petrol injection** or **13B, Diesel injection**).

AFTER REPAIR	Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool .
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DF116 PRESENT OR STORED	<u>MULTIPLEX ENGINE SPEED SIGNAL</u>
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NOTES	None.
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Carry out a test on the **multiplex network** (see **88B Multiplex**).

If the fault is still present, run fault finding on the **injection system** (see **17B, Petrol injection** or **13B, Diesel injection**).

AFTER REPAIR	Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool .
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DF117 PRESENT OR STORED	<u>LEFT-HAND REAR WHEEL MULTIPLEX SIGNAL</u>
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NOTES	None.
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Carry out a test on the **multiplex network** (see **88B Multiplex**).

If the fault is still present, run fault finding on the **Anti-lock braking and Electronic stability program systems** (see **38C, Anti-lock braking system**).

AFTER REPAIR	Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool .
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DF118 PRESENT OR STORED	<u>RIGHT-HAND REAR WHEEL MULTIPLEX SIGNAL</u>
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NOTES	None.
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Carry out a test on the **multiplex network** (see **88B Multiplex**).

If the fault is still present, run fault finding on the **Anti-lock braking and Electronic stability program systems** (see **38C, Anti-lock braking system**).

AFTER REPAIR	Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool .
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DF119 PRESENT OR STORED	<u>MULTIPLEX BRAKE PEDAL POSITION</u>
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NOTES	None.
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Carry out a test on the **multiplex network** (see **88B Multiplex**).

If the fault is still present, run fault finding on the **Anti-lock braking and Electronic stability program systems** (see **38C, Anti-lock braking system**).

AFTER REPAIR	Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool .
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DF122 PRESENT OR STORED	<u>UCH CONNECTION</u>
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NOTES	None.
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Carry out a test on the **multiplex network** (see **88B Multiplex**).

If the fault is still present, run fault finding on the **UCH** (see **87B, Passenger compartment connection unit**).

AFTER REPAIR	Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool .
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DF123 PRESENT OR STORED	<u>ABS COMPUTER CONNECTION</u>
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NOTES	None.
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Run a multiplex network test (see **88B, Multiplexing**).

If the fault is still present, run fault finding on the **Anti-lock braking and Electronic stability program systems** (see **38C, Anti-lock braking system**).

AFTER REPAIR	Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool .
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DF126 PRESENT OR STORED	<u>TURBINE SPEED SIGNAL</u>
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NOTES	The fault appears when the engine is running and the gear lever is at P .
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<p>Disconnect the battery. Disconnect the modular connector, and check the cleanness and condition of the connections. Repair if necessary.</p>
<p>Disconnect the computer. Check the cleanliness and condition of the connections. Use the Universal bornier Elé. 1681 to check the continuity and insulation of the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5DA, between components 119 and 1017. ● Connection code 5DB, between components 119 and 1017. <p>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.</p>
<p>Reconnect the modular connector. Measure the resistance of component 1017 between the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5DA. ● Connection code 5DB. <p>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. The turbine speed sensor resistance is 300 Ω ± 40 Ω. If the value is not correct, replace the turbine speed sensor.</p>

AFTER REPAIR	<p>Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool.</p>
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DF131 PRESENT OR STORED	<u>SLIPPAGE</u>
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NOTES	<p>Run fault finding on the injection system and check that it is operating correctly. Deal with all other faults first.</p> <p>Conditions for applying the fault finding procedure to stored faults: Safe mode is triggered after a fault, not by the driver.</p>
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To check that there are no faults with the turbine speed sensor, apply the interpretation of fault DF038 Turbine speed sensor circuit .
To check that there are no faults with the vehicle speed signal, apply the interpretation of fault DF048 Vehicle speed signal .
Carry out a conformity check to detect any possible faults.
If the fault is still present, a brake or clutch in the gearbox is certainly defective. Contact Techline.

AFTER REPAIR	<p>Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool.</p>
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DF144 PRESENT OR STORED	<u>COOLANT TEMPERATURE MULTIPLEX SIGNAL</u>
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NOTES	None.
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Carry out a test on the **multiplex network** (see **88B Multiplex**).

If the fault is still present, run fault finding on the **injection system** (see **17B, Petrol injection** or **13B, Diesel injection**).

AFTER REPAIR	Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool .
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DF174 PRESENT OR STORED	<u>ABS FAULT DETECTION</u>
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NOTES	None.
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Run a multiplex network test (see **88B, Multiplexing**).

If the fault is still present, run fault finding on the **Anti-lock braking and Electronic stability program systems** (see **38C, Anti-lock braking system**).

AFTER REPAIR	Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool .
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DF175 PRESENT OR STORED	<u>FRONT LEFT-HAND WHEEL SPEED MULTIPLEX SIGNAL</u>
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NOTES	None.
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Run a multiplex network test (see **88B, Multiplexing**).

If the fault is still present, run fault finding on the **Anti-lock braking and Electronic stability program systems** (see **38C, Anti-lock braking system**).

AFTER REPAIR	Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool .
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DF176 PRESENT OR STORED	<u>FRONT RIGHT-HAND WHEEL SPEED MULTIPLEX SIGNAL</u>
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NOTES	None.
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Run a multiplex network test (see **88B, Multiplexing**).

If the fault is still present, run fault finding on the **Anti-lock braking and Electronic stability program systems** (see **38C, Anti-lock braking system**).

AFTER REPAIR	Deal with any other faults. Clear the fault memory. Switch off the ignition and carry out a road test followed by a test with the diagnostic tool .
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DF177 PRESENT OR STORED	<u>AUTOMATIC TRANSMISSION OVERHEATING</u>
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NOTES	Run fault finding on the injection system and make sure that it is working perfectly.
	<p>If the following faults are present or stored, deal with them first: DF003 - DF005 - DF016 - DF017 - DF018 - DF020 - DF023 - DF024 - DF036 - DF049 - DF131</p> <p>Conditions for applying the fault finding procedure to stored faults: The fault is declared present after a road test.</p>

To make sure that there are no faults with the gearbox oil temperature sensor, apply the interpretation of fault DF023 Gearbox oil temperature sensor .
To make sure that there are no faults with the exchanger flow solenoid valve, apply the interpretation of fault DF017 Exchanger flow solenoid valve circuit .
<p>Check gearbox oil grade and level.</p> <p>If an operation is necessary (see MR 364 Mechanical, 23A, Automatic transmission, Filling-Levels (for Mégane II) and MR 370 Mechanical, 23A, Automatic transmission, Draining-Filling for Scénic II).</p> <p>Check that the gearbox is not leaking oil.</p>
Check that the water-oil exchanger is not blocked.
<p>If the fault is still present, there is a definitely a mechanical or hydraulic fault.</p> <p>Deal with the other faults then proceed with the conformity check.</p> <p>If the fault is still present, contact the Techline.</p>

AFTER REPAIR	<p>Deal with any other faults. Clear the fault memory.</p> <p>Switch off the ignition and carry out a road test followed by a test with the diagnostic tool.</p>
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NOTES	Only carry out this conformity check after a complete check with the diagnostic tool (no present or stored faults). Application conditions: engine stopped, ignition on.
	The values indicated in this conformity check are given as examples.

MAIN SCREEN

Order	Function	Parameter or Status checked or Action	Display and Notes	Fault finding
1	Engine speed	PR006: Engine speed	0 rpm	In the event of a fault, consult the interpretation of this parameter.
2	Gear selector position	ET012: Gear selector position	"P" if selector in position "P" "N" if selector in position "N" "R" if selector in position "R" "D" if selector in position "D" "M" if selector in position "M" "M+" if selector in position "M+" "M-" if selector in position "M-"	In the event of a fault, refer to the interpretation of this status.
3	Gear	ET013: Gear engaged	N for position N "1" for 1 st unlocked "2" for 2 nd unlocked "R" for reverse gear position	In the event of a fault, refer to the interpretation of this status.
4	Power supply	PR008: Computer feed voltage	10.5 < X < 16	In the event of a fault, consult the interpretation of this parameter.

NOTES	Only carry out this conformity check after a complete check with the diagnostic tool (no present or stored faults). Application conditions: engine stopped, ignition on.
	The values indicated in this conformity check are given as examples.

MAIN SCREEN (continued 1)

Order	Function	Parameter or Status checked or Action	Display and Notes	Fault finding
5	Brake pedal	ET142: Brake pedal pressed	YES , if the brake pedal is depressed NO , if the brake pedal is not depressed	In the event of a fault, refer to the interpretation of this status.
6	Brake switch	ET003: Brake light switch (opening)	ACTIVE , if the brake pedal is not depressed INACTIVE , if the brake pedal is depressed	In the event of a fault, refer to the interpretation of this status.
		ET004: STOP light contact (closure)	INACTIVE , if the brake pedal is not depressed ACTIVE , if the brake pedal is depressed	
7	Selection mode	ET097: Manual mode	INACTIVE	ACTIVE , if lever is in position M
8	Sequential lever switch	ET127: Lower sequential lever switch	OPEN, CLOSED , if selector lever in position M-	In the event of a fault, refer to the interpretation of this status.
		ET128: Upper sequential lever switch	OPEN, CLOSED , if selector lever in position M+	
		ET155: Third gear hold contact	OPEN	
9	Driving mode	ET079: Economy mode	YES , if driving is economical NO , if driving is 'sporty'	NONE
10	Gearbox oil temperature	PR004: Gearbox oil temperature	- 40 < X < 140 °C	In the event of a fault, consult the interpretation of this parameter.

NOTES	Only carry out this conformity check after a complete check with the diagnostic tool (no present or stored faults). Application conditions: engine stopped, ignition on.
	The values indicated in this conformity check are given as examples.

MAIN SCREEN (continued 2)

Order	Function	Parameter or Status checked or Action	Display and Notes	Fault finding
11	Heat exchanger flow control solenoid valve control	ET020: Exchanger flow control SV* control	INACTIVE	If ACTIVE , refer to the interpretation of this status.
12	Old oil	ET083: Old oil	YES NO	No procedure for running diagnostics on this status

*SV: solenoid valve

NOTES

Only carry out this conformity check after a **complete check** with the diagnostic tool (no present or stored faults).

Application conditions: engine stopped, ignition on.

The values indicated in this conformity check are given as examples.

SUB-FUNCTION: CHANGING GEAR

Order	Function	Parameter or Status checked or Action	Display and Notes	Fault finding
1	Gear lever position	ET012: Gear lever position	P if selector is in position P N if selector is in position N. R if selector is in position R. D if selector is in position D. M if selector is in position M. M+ if selector is in position M+. M- if selector is in position M-.	In the event of a fault, refer to the interpretation of this status.
2	Gear	ET013: Gear engaged	"N" for neutral "1" for 1 st unlocked "2" for 2 nd unlocked "R" for reverse	In the event of a fault, refer to the interpretation of this status.
3	Engine speed	PR006: Engine speed	0 rpm	In the event of a fault, consult the interpretation of this parameter.
4	Oil pressure	PR003: Oil pressure	X < 0.2 bar	In the event of a fault, consult the interpretation of this parameter.

NOTES

Only carry out this conformity check after a **complete check** with the diagnostic tool (no present or stored faults).

Application conditions: engine stopped, ignition on.

The values indicated in this conformity check are given as examples.

SUB-FUNCTION: GEAR CHANGE (CONTINUED 1)

Order	Function	Parameter or Status checked or Action	Display and Notes	Fault finding
5	Solenoid valve control	ET021: Sequence solenoid 1 control	Inactive	In the event of a fault, refer to the interpretation of this status.
		ET022: Sequence solenoid 2 control	Inactive	
		ET023: Sequence solenoid valve 3 control	Inactive	
		ET024: Sequence solenoid valve 4 control	Inactive	
		ET025: Sequence solenoid valve 5 control	Inactive	
		ET026: Sequence solenoid valve 6 control	Inactive	
		AC024: Sequential actuator control	Means of controlling all the solenoid valves	In the event of a fault, refer to the interpretation of this command.
6	Multifunction switch	ET123: Multifunction switch S2	Lever in position P CLOSED	In the event of a fault, refer to the interpretation of this status.
		ET124: Multifunction switch S3	OPEN	
		ET125: Multifunction switch S4	OPEN	
7	Feeds	ET001: Solenoid valve supply	PRESENT	In the event of a fault, refer to the interpretation of this status.

NOTES	Only carry out this conformity check after a complete check with the diagnostic tool (no present or stored faults). Application conditions: engine stopped, ignition on.
	The values indicated in this conformity check are given as examples.

SUB-FUNCTION: GEAR CHANGE (CONTINUED 2)

Order	Function	Parameter or Status checked or Action	Display and Notes	Fault finding
8	Selection mode	ET097: Manual Mode	INACTIVE ACTIVE , if lever is in position M	In the event of a fault, refer to the interpretation of this status.
9	Sequential lever switch	ET127: Lower sequential lever switch	OPEN CLOSED , if selector lever in position M-	In the event of a fault, refer to the interpretation of this status.
		ET128: Upper sequential lever switch	INACTIVE CLOSED , if selector lever in position M+	
		ET155: Third gear hold contact	OPEN	

NOTES	Only carry out this conformity check after a complete check with the diagnostic tool (no present or stored faults). Application conditions: engine stopped, ignition on.
	The values indicated in this conformity check are given as examples.

SUB-FUNCTION: PRESSURE CONTROL

Order	Function	Parameter or Status checked or Action	Display and Notes	Fault finding
1	Gearbox ratio	ET013: Gear engaged	N for neutral position 1 for 1 st unlocked 2 for 2 nd unlocked R for reverse gear position	In the event of a fault, refer to the interpretation of this status.
2	Engine speed	PR006: Engine speed	0 rpm	In the event of a fault, consult the interpretation of fault DF115.
3	Oil pressure	PR003: Oil pressure	$X < 0.2 \text{ bar}$	In the event of a fault, consult the interpretation of this parameter.
		PR138: Reference pressure	21 bar	None.
		PR146: Difference between reference and oil pressure	$X = \text{PR138} - \text{PR003}$	None.
4	Oil temperature	PR004: Gearbox oil temperature	$- 40 < X < 140 \text{ }^{\circ}\text{C}$	In the event of a fault, consult the interpretation of this parameter.

NOTES

Only carry out this conformity check after a **complete check** with the diagnostic tool (no present or stored faults).

Application conditions: engine stopped, ignition on.

The values indicated in this conformity check are given as examples.

SUB-FUNCTION: LEVER LOCK

Order	Function	Parameter or Status checked or Action	Display and Notes	Fault finding
1	Gear lever position	ET012: Gear lever position	P if selector is in position P N if selector is in position N. R if selector is in position R. D if selector is in position D. M if selector is in position M. M+ if selector is in position M+. M- if selector is in position M-.	In the event of a fault, refer to the interpretation of this status.
2	Brake pedal	ET142: Brake pedal pressed	YES , if brake pedal is pressed NO , if brake pedal is not pressed	In the event of a fault, refer to the interpretation of this status.
		ET003: Brake light switch (open)	ACTIVE , if brake pedal is not pressed INACTIVE , if brake pedal is pressed	In the event of a fault, refer to the interpretation of this status.
		ET004: Brake light switch (closure)	ACTIVE , if brake pedal is not pressed INACTIVE , if brake pedal is pressed	In the event of a fault, refer to the interpretation of this status.
3	Selector lever locking	ET157: Gear lever unlocking	YES , if brake pedal is pressed NO , if brake pedal is not pressed	

AUTOMATIC TRANSMISSION

Fault finding – Conformity check

23A

NOTES	Only carry out this conformity check after a complete check with the diagnostic tool (no present or stored faults). Application conditions: engine stopped, ignition on.
	The values indicated in this conformity check are given as examples.

SUB-FUNCTION: GEAR LEVER (CONTINUED)

Order	Function	Parameter or Status checked or Action	Display and Notes	Fault finding
4	Multifunction switch	ET123: Multifunction switch S2 ET124: Multifunction switch S3 ET125: Multifunction switch S4	In position P OPEN OPEN OPEN	In the event of a fault, refer to the interpretation of this status.
5	Gear change mode	ET097: Manual mode	ACTIVE , if selector lever is in position M, M+ or M- INACTIVE , if selector lever is in position P, R, N or D	In the event of a fault, refer to the interpretation of this status.
6	Push-button shift	ET127: Lower sequential lever switch ET128: Upper sequential lever switch	CLOSED , if lever in position M OPEN , if lever is in any position other than M- CLOSED , if lever in position M+ OPEN , if lever is in any position other than M+	In the event of a fault, refer to the interpretation of this status.

NOTES

Only carry out this conformity check after a **complete check** with the diagnostic tool (no present or stored faults).

Application conditions: engine stopped, ignition on.

The values indicated in this conformity check are given as examples.

SUB-FUNCTION: LOCKUP/UNLOCKING

Order	Function	Parameter or Status checked or Action	Display and Notes	Fault finding
1	Rotation speeds	PR006: Engine speed	0 rpm	In the event of a fault, consult the interpretation of this parameter.
		PR007: Turbine speed	0 rpm	In the event of a fault, consult the interpretation of this parameter.
		PR128: Engine/turbine speed difference	0 rpm	In the event of a fault, consult the interpretation of this parameter.
2	Oil pressure	PR003: Oil pressure	$X < 0.2 \text{ bar}$	In the event of a fault, consult the interpretation of this parameter.
		PR138: Reference pressure	21 bar	None.
		PR146: Difference between reference and oil pressure	$X = \text{PR138} - \text{PR003}$	None.
3	Torque converter	ET071: Torque converter	INACTIVE	In the event of a fault, refer to the interpretation of this status.
4	Oil temperature	PR004: Gearbox oil temperature	$-10 < X < 150 \text{ }^{\circ}\text{C}$ $-40 < X < 140 \text{ }^{\circ}\text{C}$	
		ET010: Oil too hot signal	YES/NO	YES, if the oil temperature is $> 140 \text{ }^{\circ}\text{C}$
5	Driving mode	ET079: Economy mode	YES, if driving is economical NO, if driving is 'sporty'	None.

NOTES	Only carry out this conformity check after a complete check with the diagnostic tool (no present or stored faults). Application conditions: engine stopped, ignition on.
	The values indicated in this conformity check are given as examples.

SUB-FUNCTION: STATIONARYDECLUTCHING

Order	Function	Parameter or Status checked or Action	Display and Notes	Fault finding
1	Engine speed	PR006: Engine speed	0 rpm	In the event of a fault, consult the interpretation of this parameter.
2	Gear lever position	ET012: Gear lever position	<p>P if selector is in position P</p> <p>N if selector is in position N.</p> <p>R if selector is in position R.</p> <p>D if selector is in position D.</p> <p>M if selector is in position M.</p> <p>M+ if selector is in position M+.</p> <p>M- if selector is in position M-.</p>	In the event of a fault, refer to the interpretation of this status.
3	Gear engaged	ET013: Gear engaged	<p>R for reverse.</p> <p>1P for 1st locked.</p> <p>2P for 2nd locked.</p> <p>3P for 3rd locked.</p> <p>4P for 4th locked.</p> <p>1G for 1st slipping.</p> <p>2G for 2nd slipping.</p> <p>3G for 3rd slipping.</p> <p>4G for 4th slipping.</p> <p>1 for 1st unlocked.</p> <p>2 for 2nd unlocked.</p> <p>3 for 3rd unlocked.</p> <p>4 for 4th unlocked.</p>	In the event of a fault, refer to the interpretation of this status.

NOTES	Only carry out this conformity check after a complete check with the diagnostic tool (no present or stored faults). Application conditions: engine stopped, ignition on.
	The values indicated in this conformity check are given as examples.

SUB-FUNCTION: STATIONARY DECLUTCHING (CONTINUED)

Order	Function	Parameter or Status checked or Action	Display and Notes	Fault finding
4	Brake pedal pressed	ET142: Brake pedal pressed	YES , if the brake pedal is depressed NO , if the brake pedal is not depressed	In the event of a fault, refer to the interpretation of this status.
5	Brake pedal	ET003: Brake light switch (opening)	OPEN , brake pedal released. CLOSED , brake pedal depressed	In the event of a fault, refer to the interpretation of this status.
6	Brake pedal	ET004: Brake light switch (closure)	CLOSED , brake pedal released. OPEN , brake pedal depressed.	In the event of a fault, refer to the interpretation of this status.

NOTES	Only carry out this conformity check after a complete check with the diagnostic tool (no present or stored faults). Application conditions: engine stopped, ignition on.
	The values indicated in this conformity check are given as examples.

SUB-FUNCTION: CREEPING AT IDLE SPEED

Order	Function	Parameter or Status checked or Action	Display and Notes	Fault finding
1	Oil pressure	PR003: Oil pressure	X < 0.2 bar	In the event of a fault, consult the interpretation of this parameter.
2	Oil temperature	PR004: Gearbox oil temperature	-40 °C < X < 140 °C	In the event of a fault, consult the interpretation of this parameter.
3	Engine speed	PR006: Engine speed	0 rpm	In the event of a fault, consult the interpretation of this parameter.
4	Engine speed	PR007: Turbine speed	0 rpm	In the event of a fault, consult the interpretation of this parameter.
5	Engine/turbine speed difference	PR128: Engine/turbine speed difference	0 rpm	In the event of a fault, consult the interpretation of this parameter.

NOTES	Only carry out this conformity check after a complete check with the diagnostic tool (no present or stored faults). Application conditions: engine stopped, ignition on.
	The values indicated in this conformity check are given as examples.

SUB-FUNCTION: CREEPING AT IDLE SPEED (CONTINUED)

Order	Function	Parameter or Status checked or Action	Display and Notes	Fault finding
6	Standard pedal position	PR135: Standard pedal position	%	In the event of a fault, consult the interpretation of this parameter.
7	Brake pedal	ET003: Brake light switch (opening)	OPEN , brake pedal released. CLOSED , brake pedal depressed.	In the event of a fault, refer to the interpretation of this status.
8	Brake pedal	ET004: Brake light switch (closure)	CLOSED , brake pedal released. OPEN , brake pedal depressed.	In the event of a fault, refer to the interpretation of this status.
9	Gear engaged	ET013: Gear engaged	R for reverse. 1P for 1 st locked. 2P for 2 nd locked. 3P for 3 rd locked. 4P for 4 th locked. 1G for 1 st slipping. 2G for 2 nd slipping. 3G for 3 rd slipping. 4G for 4 th slipping. 1 for 1 st unlocked. 2 for 2 nd unlocked. 3 for 3 rd unlocked. 4 for 4 th unlocked.	In the event of a fault, refer to the interpretation of this status.

AUTOMATIC TRANSMISSION

Fault finding – Status summary table

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Tool status	Diagnostic tool title
ET001	Solenoid valve supply
ET003	Brake light switch (opening)
ET004	Brake light switch (closure)
ET010	Oil too hot signal
ET012	Gear lever position
ET013	Gear engaged
ET020	Exchanger flow control SV* control
ET021	Sequence solenoid 1 control
ET022	Sequence solenoid 2 control
ET023	Sequence solenoid valve 3 control
ET024	Sequence solenoid valve 4 control
ET025	Sequence solenoid valve 5 control
ET026	Sequence solenoid valve 6 control
ET071	Torque converter
ET079	Economy mode
ET083	Old oil
ET097	Manual mode
ET108	Torque reduction
ET123	Multifunction switch S2
ET124	Multifunction switch S3
ET125	Multifunction switch S4
ET126	Multifunction switch P/N
ET127	Lower sequential lever switch
ET128	Upper sequential lever switch
ET142	Brake pedal pressed
ET155	Third gear hold contact
ET157	Gear lever unlocking

*SV: solenoid valve

ET001	<u>SOLENOID VALVE SUPPLY</u>
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NOTES	There must be no present or stored faults.
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<p>Force the solenoid valves supply by running command AC024 Sequential actuator control (see Interpretation of commands).</p> <p>Disconnect the electric/hydraulic interface connector and check:</p> <ul style="list-style-type: none"> ● Check for earth on connection 5AU of component 757. ● Check for earth on connection 5DN of component 1019. ● Check for earth on connection 5AZ of component 754. <p>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.</p> <p>The solenoid valves feed status is PRESENT at a voltage of + 12 V.</p> <p>If the status is not correct, apply the interpretation of fault DF012 Solenoid valves supply.</p> <p>Repair if necessary.</p>

AFTER REPAIR	Repeat the conformity check from the start.
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ET003	<u>BRAKE LIGHT SWITCH (OPENING)</u>
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NOTES	There must be no present or stored faults.
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The status displays OPEN with the pedal released and changes to CLOSED with the brake pedal depressed.
Check the cleanliness and the condition of the brake light switch connections.
Check the positioning, setting and correct operation of the brake light switch (Pay attention to the floor carpet which can block the switch).
<p>Disconnect the battery. Disconnect the computer. Check the cleanliness and condition of the connections. Use the Universal bornier Elé. 1681 to check the insulation, continuity and the absence of interference resistance on the following connection:</p> <ul style="list-style-type: none"> ● Connection code 5A, between components 119 and 160. <p>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>
If the correct status is not displayed, replace the switch.

AFTER REPAIR	Repeat the conformity check from the start.
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ET004	<u>STOP LIGHT SWITCH (CLOSURE)</u>
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NOTES	There must be no present or stored faults.
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The status displays CLOSED with the pedal released and changes to OPEN with the brake pedal depressed.
Check the cleanliness and the condition of the brake light switch connections.
Check the positioning, setting and correct operation of the brake light switch (Pay attention to the floor carpet which can block the switch).
<p>Disconnect the battery. Disconnect the computer. Check the cleanliness and condition of the connections. Use the Universal bornier Elé. 1681 to check the insulation, continuity and the absence of interference resistance on the following connection:</p> <ul style="list-style-type: none"> ● Connection code 5A, between components 119 and 160. <p>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. Repair if necessary. If the correct status is not displayed, replace the switch.</p>

AFTER REPAIR	Repeat the conformity check from the start.
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ET010	<u>OIL TOO HOT SIGNAL</u>
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NOTES	There must be no present or stored faults.
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This status means the oil temperature is above the normal operation temperature.
The status displays **NO** if the gearbox oil temperature is below **140°C**.
The status changes to **YES** when the gearbox oil temperature rises above **140°C**.

If the correct status is not displayed, use the interpretation of fault **DF177 Automatic transmission overheating**.

AFTER REPAIR	Repeat the conformity check from the start.
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ET012	<u>GEAR LEVER POSITION</u>
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NOTES	There must be no present or stored faults.
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SIDE LEVER "P"-"R"- "N"-"D"	<p>Check the cleanliness, condition and mounting of the automatic transmission multifunction switch. Check the control setting (see MR 370 Mechanical, 23A Automatic transmission, Multifunction switch, Adjustment (for Mégane II and Scénic II)).</p> <p>Disconnect the battery. Disconnect the modular connector and check the cleanliness and condition of the connector A connections. If one of the connectors is faulty and there is a repair method (see Technical Note 6015A, Electrical wiring repair, wiring: precautions for repair), repair the connector, otherwise replace the wiring.</p> <p>Check the continuity of the following connections: Lever in position P ● Connection codes 5DG and 5DK between components 119 and 485. Lever in position R ● Connection codes 5DG, 5DH, DJ et 5DK between components 119 and 485. Lever in position N ● Connection code 5DH between components 119 and 485. Lever in position D ● Connection code 5DJ between components 119 and 485. Check the insulation from + 12 V of the following connections: Lever in position P ● Connection codes 5DH, 5DJ and 5DK between components 119 and 485. Lever in position N ● Connection codes 5DH, 5DJ and 5DK between components 119 and 485. Lever in position D ● Connection codes 5DG, 5DH and 5DK between components 119 and 485. 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.</p>
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AFTER REPAIR	Repeat the conformity check from the start.
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ET012 CONTINUED	
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SIDE LEVER "P"-"R"- "N"-"D" (continued)	<p>Disconnect the multifunction switch. Use the universal bornier Elé. 1681 to check the insulation, continuity and the absence of interference resistance on the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5DG between components 119 and 485. ● Connection code 5DH between components 119 and 485. ● Connection code 5DJ between components 119 and 485. ● Connection code 5DK between components 119 and 485. <p>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. Repair if necessary.</p>
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LEVER POSITION M, M+ AND M- incremental shift	<p>Check the cleanliness and the condition of the sequential lever module connections.</p> <p>Disconnect the battery. Disconnect the computer. Check the cleanliness and condition of the connections. Use the Universal bornier Elé. 1681. Check the insulation, continuity and absence of interference resistance on the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5FM between components 119 and 129. <p>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> <ul style="list-style-type: none"> ● Connection code 5H between components 119 and 129. <p>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> <ul style="list-style-type: none"> ● Connection code N between components 129 and 107. <p>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. Repair if necessary.</p>
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AFTER REPAIR	<p>Repeat the conformity check from the start.</p>
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ET013	<u>GEAR ENGAGED</u>
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NOTES	There must be no present or stored faults.
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1 for 1 st unlocked 2 for 2 nd unlocked 3 for 3 rd unlocked 4 for 4 th unlocked 1G for 1 st slipping 2G for 2 nd slipping 3G for 3 rd slipping 4G for 4 th slipping	1P for 1 st locked 2P for 2 nd locked. 3P for 3 rd locked 4P for 4 th locked R for reverse D for the default position N for neutral position
<p>If the fault comes from converter locking, apply the interpretation of faults DF016 Solenoid valve circuit locking, DF018 Lockup slippage and DF120 Controlled slipping.</p>	
<p>If the fault comes from the engaged gear, carry out fault finding on the multifunction switch. Check that statuses ET123, ET124 and ET125 operate correctly.</p> <ul style="list-style-type: none"> – ET123 "Multifunction switch S2". – ET124 "Multifunction switch S3". – ET125 "Multifunction switch S4". <p>Check the multifunction switch settings. If the fault is still present, contact the Techline.</p>	

AFTER REPAIR	Repeat the conformity check from the start.
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ET020	<u>EXCHANGER FLOW CONTROL SOLENOID VALVE*</u>
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NOTES	There must be no present or stored faults.
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<p>The exchanger flow control solenoid valve is ACTIVE when the gearbox oil temperature exceeds 100°C and the engine speed exceeds 2000 rpm. Otherwise the solenoid valve remains inactive.</p>
<p>Run command AC024 Actuator sequential control and check that the activation status changes from INACTIVE to ACTIVE. When powered, if the solenoid valve is ACTIVE the voltage should be 0 V. When powered, if the solenoid valve is INACTIVE the voltage should be 12 V.</p>
<p>Reconnect the computer. Activate the solenoid valves with command AC024 Actuator sequential control and check the solenoid valve current. If the current is 260 mA, the solenoid valve is working properly. If the current is weaker, check the computer connections and harness up to the exchanger flow solenoid valve.</p>
<p>If the status of the command fails to change, use the interpretation of fault DF017 Exchanger flow solenoid valve circuit.</p>
<p>If the fault is still present after the fault finding procedure for fault DF017 Exchanger flow solenoid valve circuit has been followed, contact your Techline.</p>

* EV: Solenoid valve.

AFTER REPAIR	<p>Repeat the conformity check from the start. Make sure that shifting up and down through each gear works properly.</p>
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ET021	<u>SEQUENCE SOLENOID VALVE 1 CONTROL</u>
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NOTES	There must be no present or stored faults.
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<p>This status displays ACTIVE when the gear engaged is 3 or 4 and INACTIVE when other gears are engaged.</p> <p>Disconnect the computer. Check the cleanliness and condition of the connectors. Check the continuity between track 10 of the computer connector and track B8 of the modular connector. Check the continuity of the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5AV between components 119 and 754. <p>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. Measure the resistance of component 754 between the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5AV. ● Connection code 5AU. <p>The value should be 40 Ω ± 2 Ω at approximately 20° C. Repair if necessary. 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.</p> <p>If the resistance is greater than 50 Ω, check the wiring harness, computer connector and modular connector.</p> <p>Reconnect the computer. Activate the solenoid valves with command AC024 Actuator sequential control and measure the current in the solenoid valves. If the current is 250 mA, the solenoid valve is working properly. If the current is weaker, check the computer connections and harness up to the solenoid valve.</p> <p>If the status does not function as specified, use the interpretation of fault DF085 EVS1 Sequence solenoid valve circuit. If the fault is still present, replace the electric/hydraulic interface.</p>
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AFTER REPAIR	Repeat the conformity check from the start. Make sure that shifting up and down through each gear works properly.
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ET022	<u>SEQUENCE SOLENOID VALVE 2 CONTROL</u>
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NOTES	There must be no present or stored faults.
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<p>This status displays ACTIVE when the gear engaged is N or 2 or 3 or 4 and INACTIVE when other gears are engaged.</p> <p>Disconnect the computer. Check the cleanliness and condition of the connectors. Check the continuity of the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5AW between components 119 and 754. <p>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>Measure the resistance of component 754 between the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5AW. ● Connection code 5AU. <p>The value should be 40 Ω ± 2 Ω at approximately 20° C. 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.</p> <p>If the resistance is greater than 50 Ω, check the wiring harness, computer connector and modular connector.</p> <p>Reconnect the computer. Activate the solenoid valves with command AC024 Actuator sequential control and measure the current in the solenoid valves. If the current is 250 mA, the solenoid valve is working properly. If the current is weaker, check the computer connections and harness up to the solenoid valve.</p> <p>If the status does not function as specified, use the interpretation of fault DF086 EVS2 Sequence solenoid valve circuit. If the fault is still present, replace the electric/hydraulic interface.</p>
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AFTER REPAIR	<p>Repeat the conformity check from the start. Make sure that shifting up and down through each gear works properly.</p>
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ET023	<u>SEQUENCE SOLENOID VALVE 3 CONTROL</u>
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NOTES	There must be no present or stored faults.
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This status displays ACTIVE when the gear engaged is P or N or 1 and INACTIVE when other gears are engaged.	
<p>Disconnect the computer. Check the cleanliness and condition of the connectors.</p> <p>Check the continuity of the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5AX between components 119 and 754. <p>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>Measure the resistance of component 754 between the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5AX. ● Connection code 5AU. <p>The value should be 40 Ω ± 2 Ω at approximately 20°C.</p> <p>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.</p>	
If the resistance is greater than 50 Ω , check the wiring harness, computer connector and modular connector.	
<p>Reconnect the computer.</p> <p>Activate the solenoid valves with command AC024 Actuator sequential control and measure the current in the solenoid valves.</p> <p>If the current is 250 mA, the solenoid valve is working properly.</p> <p>If the current is weaker, check the computer connections and harness up to the solenoid valve.</p>	
<p>If the status does not function as specified, use the interpretation of fault DF087 EVS3 Sequence solenoid valve circuit.</p> <p>If the fault is still present, replace the electric/hydraulic interface.</p>	

AFTER REPAIR	<p>Repeat the conformity check from the start.</p> <p>Make sure that shifting up and down through each gear works properly.</p>
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ET024	<u>SEQUENCE SOLENOID VALVE 4 CONTROL</u>
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NOTES	There must be no present or stored faults.
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This status displays ACTIVE when the gear engaged is 1 or 2 and INACTIVE when other gears are engaged.	
<p>Disconnect the computer. Check the cleanliness and condition of the connectors. Check the continuity of the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5AY between components 119 and 754. <p>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. Measure the resistance of component 754 between the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5AU. ● Connection code 5AY. <p>The value should be 40 Ω ± 2 Ω at approximately 20°C. 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.</p>	
If the resistance is greater than 50 Ω , check the wiring harness, computer connector and modular connector.	
<p>Reconnect the computer. Activate the solenoid valves with command AC024 Actuator sequential control and measure the current in the solenoid valves. If the current is 250 mA, the solenoid valve is working properly. If the current is weaker, check the computer connections and harness up to the solenoid valve.</p>	
<p>If the status does not function as specified, use the interpretation of fault DF089 EVS4 Sequence solenoid valve circuit. If the fault is still present, replace the electric/hydraulic interface.</p>	

AFTER REPAIR	<p>Repeat the conformity check from the start. Make sure that shifting up and down through each gear works properly.</p>
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ET025	<u>SEQUENCE SOLENOID VALVE 5 CONTROL</u>
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NOTES	There must be no present or stored faults.
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<p>This status displays ACTIVE when the gear engaged is 1 and INACTIVE when other gears are engaged.</p> <p>Disconnect the computer. Check the cleanliness and condition of the connectors. Check the continuity of the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5DL between components 119 and 754. <p>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>Measure the resistance of component 754 between the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5AU. ● Connection code 5DL. <p>The value should be 40 Ω ± 2 Ω at approximately 20°C. 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.</p> <p>If the resistance is greater than 50 Ω, check the wiring harness, computer connector and modular connector.</p> <p>Reconnect the computer. Activate the solenoid valves with command AC024 Actuator sequential control and measure the current in the solenoid valves. If the current is 250 mA, the solenoid valve is working properly. If the current is weaker, check the computer connections and harness up to the solenoid valve.</p> <p>If the status is still not correct, use the interpretation of fault DF088 EVS5 Sequence solenoid valve circuit. If the fault is still present, replace the electric/hydraulic interface.</p>
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AFTER REPAIR	Repeat the conformity check from the start. Make sure that shifting up and down through each gear works properly.
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ET026	<u>SEQUENCE SOLENOID VALVE 6 CONTROL</u>
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NOTES	There must be no present or stored faults.
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<p>This status displays INACTIVE with any gear engaged.</p> <p>Disconnect the computer. Check the cleanliness and condition of the connectors. Check the continuity of the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5DM between components 119 and 754. <p>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>Measure the resistance of component 754 between the following connections: The value should be 40 Ω ± 2 Ω at approximately 20°C.</p> <p>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.</p> <p>If the resistance is greater than 50 Ω, check the wiring harness, computer connector and modular connector.</p> <p>Reconnect the computer. Activate the solenoid valves with command AC024 Actuator sequential control and measure the current in the solenoid valves. If the current is 250 mA, the solenoid valve is working properly. If the current is weaker, check the computer connections and harness up to the solenoid valve.</p> <p>If the status is still not correct, use the interpretation of fault DF112 EVS6 Sequence solenoid valve circuit. If the fault is still present, replace the electric/hydraulic interface.</p>
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AFTER REPAIR	<p>Repeat the conformity check from the start. Make sure that shifting up and down through each gear works properly.</p>
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ET071	<u>TORQUE CONVERTER</u>
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NOTES	There must be no present or stored faults.
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<p>This indicates the status of the torque converter.</p> <p>The status should be ACTIVE when the vehicle is driven with a gear engaged.</p> <p>The status should be INACTIVE when starting, changing gears, or if the vehicle is stopped.</p>
<p>If the status does not function as specified, apply the interpretation of fault DF016 Converter lockup solenoid valve circuit.</p>
<p>If the fault is still present, contact your Techline.</p>

AFTER REPAIR	<p>Repeat the conformity check from the start.</p> <p>Make sure that shifting up and down through each gear works properly.</p>
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ET097	<u>MANUAL MODE</u>
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NOTES	There must be no present or stored faults.
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<p>This status indicates the gear lever position.</p> <p>This status displays ACTIVE when the gear lever is in position M, M+ or M-.</p> <p>This status displays INACTIVE when the gear lever is in positions P, R, N or D.</p>
If the correct status is not displayed, use the interpretation of fault DF093 Manual sequential controls circuits .
If the fault is still present, replace the sequential lever module.
If the fault is still present, contact your Techline.

AFTER REPAIR	<p>Repeat the conformity check from the start.</p> <p>Make sure that shifting up and down through each gear works properly.</p>
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ET123 ET124 ET125	<u>MULTIFUNCTION SWITCH S2</u> <u>MULTIFUNCTION SWITCH S3</u> <u>MULTIFUNCTION SWITCH S4</u>
--	--

NOTES	<p>There must be no present or stored faults.</p> <p>Multifunction switch contact S1 is not connected on this model.</p>
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These statuses show the position of the multifunction switch for each gear lever position.
The switch status can be **OPEN** or **CLOSED** (see table below).

	S2	S3	S4
P	OPEN	CLOSED	CLOSED
R	OPEN	OPEN	OPEN
N	CLOSED	OPEN	CLOSED
D	CLOSED	CLOSED	OPEN
M	CLOSED	CLOSED	OPEN
M+	CLOSED	CLOSED	OPEN
M-	CLOSED	CLOSED	OPEN

If the correct status is not displayed, use the interpretation of fault **DF009 Multifunction switch in prohibited position**.

If after these checks, statuses **ET123**, **ET124** or **ET125** are incorrect, replace the multifunction switch.

AFTER REPAIR	<p>Repeat the conformity check from the start.</p> <p>Make sure that shifting up and down through each gear works properly.</p>
---------------------	---

DP0TA2000_V10_ET123/DP0TA2000_V11_ET123DP0TA2000_V15_ET123/
DP0TA2000_V10_ET124/DP0TA2000_V11_ET124DP0TA2000_V15_ET124/
DP0TA2000_V10_ET125/DP0TA2000_V11_ET125DP0TA2000_V15_ET125

ET126	<u>MULTIFUNCTION SWITCH P/N</u>
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NOTES	There must be no present or stored faults.
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These indicate the status of the P/N multifunction switch contact for each gearshift position.
<p>The switch status is "OPEN" or "CLOSED".</p> <p>The status should be OPEN when the gear lever is in any position except P.</p> <p>The status should be CLOSED when the gear lever is in position P.</p>
If this status does not operate as indicated above, use the interpretation of fault DF054 Multifunction switch P/N contact signal .
If the fault is still present, contact your Techline.

AFTER REPAIR	<p>Repeat the conformity check from the start.</p> <p>Make sure that shifting up and down through each gear works properly.</p>
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ET127	<u>LOWER SEQUENTIAL LEVER SWITCH</u>
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NOTES	There must be no present or stored faults.
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<p>This indicates the status of the lower sequential lever switch.</p> <p>This status displays ACTIVE with the gear lever in position M-.</p> <p>This status displays INACTIVE with the gear lever in a position other than M-.</p>
<p>Check the sequential lever supply on the following connections:</p> <ul style="list-style-type: none"> ● Check for + 12 V on connection AP43 of component 129. ● Check for the vehicle earth on connection N of component 129. <p>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.</p>
<p>With the gear lever in position M, measure the voltage of the following connections:</p> <ul style="list-style-type: none"> ● Check for the vehicle earth on connection 5H of component 129. ● Check for the vehicle earth on connection 5FM of component 129. <p>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.</p> <p>If any of the measured values is + 12 V, replace the sequential lever</p> <p>If the values are 0 V, check that the selector lever positions match those displayed on the instrument panel.</p> <p>Repair if necessary.</p>
<p>If the correct status is not displayed, use the interpretation of fault DF093 Manual sequential controls circuits.</p> <p>If the fault is still present, contact the Techline.</p>

AFTER REPAIR	Repeat the conformity check from the start.
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ET128	<u>UPPER SEQUENTIAL LEVER SWITCH</u>
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NOTES	There must be no present or stored faults.
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<p>This indicates the status of the lower sequential lever switch.</p> <p>This status displays ACTIVE with the gear lever in position M+.</p> <p>This status displays INACTIVE with the gear lever in a position other than M+.</p>
<p>Check the sequential lever supply on the following connections:</p> <ul style="list-style-type: none"> ● Check for + 12 V on connection AP43 of component 129. ● Check for the vehicle earth on connection N of component 129. <p>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.</p>
<p>With the gear lever in position M, measure the voltage of the following connections:</p> <ul style="list-style-type: none"> ● Check for the vehicle earth on connection 5H of component 129. ● Check for the vehicle earth on connection 5FM of component 129. <p>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.</p> <p>If any of the measured values is + 12 V, replace the sequential lever</p> <p>If the values are 0 V, check that the selector lever positions match those displayed on the instrument panel.</p>
<p>If the correct status is not displayed, use the interpretation of fault DF093 Manual sequential controls circuits.</p> <p>If the fault is still present, contact the Techline.</p>

AFTER REPAIR	Repeat the conformity check from the start.
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ET142	<u>BRAKE PEDAL DEPRESSED</u>
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NOTES	There must be no present or stored faults.
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<p>This status indicates the position of the brake pedal The status is YES when the brake pedal is pressed. The status is NO when the brake pedal is not pressed.</p>
<p>If the status does not function as specified above, use the interpretation of fault DF119 Brake pedal position.</p>
<p>Disconnect the computer. Check the cleanliness and condition of the connections. Check the continuity, insulation and the absence of interference resistance on the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5A between components 119 and 160. <p>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, replace the brake sensor. If the fault is still present, contact the Techline.</p>

ET155	<u>FIXED THIRD CONTACT</u>
NOTES	The vehicle does not have a fixed 3 rd (D3). Ignore ET155 "Fixed third contact" .

ET157	<u>GEAR LEVER UNLOCKING</u>
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NOTES	There must be no present or stored faults.
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<p>This status indicates whether or not the gear lever is unlocked.</p> <p>Lever in position P.</p> <p>The status is YES when the brake pedal is pressed.</p> <p>The status is NO when the brake pedal is not pressed.</p> <p>Lever in any position except P.</p> <p>The status is YES whether or not the brake pedal is pressed.</p>
<p>Check that the instrument panel indicates that the lever is in position P.</p> <p>Check that, when the brake pedal is pressed, the "Press brake pedal" message disappears from the instrument panel.</p>
<p>Check the gear lever operation up to the multifunction switch.</p> <p>Adjust the cable if necessary.</p>
<p>Check that statuses ET154, ET123, ET124 and ET125 Multifunction switch are correct.</p>
<p>If the correct status is not displayed, use the interpretation of fault DF095 Gear lever locking electromagnet circuit.</p>
<p>If the fault is still present, contact the Techline.</p>

AUTOMATIC TRANSMISSION

Fault finding – Parameter summary table

23A

Tool parameter	Diagnostic tool title
PR001	Coolant temperature
PR003	Oil pressure
PR004	Gearbox oil temperature
PR006	Engine speed
PR007	Turbine speed
PR008	Computer feed voltage
PR128	Engine/turbine speed difference
PR135	Standard pedal position
PR138	Reference pressure
PR146	Difference between reference and pressure

PR001	<u>COOLANT TEMPERATURE</u>
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NOTES	There must be no present or stored faults.
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Check that the cooling circuit is topped up and properly bled. Perform the required operations.
Check the cleanliness and condition of the coolant temperature sensor and its connections.
If no fault is revealed as a result of these checks, refer to the interpretation of the coolant temperature parameter (see 17B, Petrol injection or 13B Diesel injection).
Replace the coolant temperature sensor, if necessary. If the fault is still present after the coolant temperature sensor has been replaced, contact the Techline.

AFTER REPAIR	Repeat the conformity check from the start.
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PR003	<u>OIL PRESSURE</u>
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NOTES	There must be no present or stored faults.
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<p>Disconnect the battery. Disconnect the modular connector, and check the cleanliness and condition of the connections.</p>	<p>Disconnect the computer. Check the cleanliness and condition of the connections. Use the Universal bornier Elé. 1681 to check the insulation, continuity and the absence of interference resistance on the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5U between components 119 and 781. ● Connection code 5W between components 119 and 781. ● Connection code 5V between components 119 and 781. ● Connection code 5AZ, between components 119 and 754. ● Connection code 5BA between components 119 and 754. <p>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.</p>
<p>Reconnect the modular connector. Measure the resistance of component 781 between the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5U. ● Connection code 5W. <p>The value should be approximately 20 kΩ. 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 value is not correct, replace the sensor.</p>	<p>Measure the resistance of component 754 between the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5AZ. ● Connection code 5BA. <p>The value should be approximately 1 Ω ± 0.2 Ω at 20 °C. 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 value is not correct, the solenoid valve or the electric/hydraulic interface harness is damaged.</p>
<p>Check gearbox oil grade and level. If an operation is necessary (see MR 364 Mechanical, 23A, Automatic transmission, Filling-Levels (for Mégane II) and MR 370 Mechanical, 23A, Automatic transmission, Draining-Filling (for Scénic II)). Check that the gearbox is not leaking oil.</p>	

AFTER REPAIR	Repeat the conformity check from the start.
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PR003 CONTINUED	
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See the Taking line pressure section of the Workshop Repair Manual.
Set up the pressure gauge for a line pressure reading.
With a warm engine and the gearbox oil temperature between **60 and 80 °C**, check the difference between the line pressure sensor (**PR003**) and the pressure gauge under the following conditions:

- with the engine stopped, the pressure gauge should indicate a residual pressure of about **0.2 bar**.
If the sensor reading differs by more than **0.2 bar**, replace the sensor.
- with the engine running at about **1200 rpm** the pressure gauge reading should reach **7 bar**.
If the sensor reading differs by more than **0.8 bar**, replace the sensor.

Warm engine with gearbox oil temperature between **60 and 80 °C**.
Take the line pressure readings under the following conditions:

- with the gear lever in **P** or **N** and engine speed at **2000 rpm** the pressure should be between **2.6 and 3.2 bar**.
- with the gear lever at **R** and engine speed at **2000 rpm**, the pressure should be above **4 bar**.
- with the gear lever at **D** and engine speed at **2000 rpm**, the pressure in first gear should be greater than **7 bar**.

If the values are not correct, there is a fault inside the gearbox.

AFTER REPAIR	Repeat the conformity check from the start.
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PR004	<u>GEARBOX OIL TEMPERATURE</u>
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NOTES	There must be no present or stored faults.
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<p>Disconnect the battery. Disconnect the modular connector, and check the cleanliness and condition of the connections.</p>	<p>Disconnect the computer. Check the cleanliness and condition of the connections. Use the Universal bornier Elé. 1681 to check the insulation, continuity and the absence of interference resistance on the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5BC between components 119 and 754. ● Connection code 5BB, between components 119 and 754. ● Connection code 5DN between components 119 and 1019. ● Connection code 5DD between components 119 and 1019. <p>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.</p>
<p>Reconnect the modular connector. Measure the resistance of component 754 between the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5BC. ● Connection code 5BB. <p>The value should be between 2360 and 2660 Ω at a temperature of 20 °C and between 290 and 327 Ω at a temperature of 80 °C. 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 value is not correct, the sensor or the electric/hydraulic interface harness is damaged.</p>	<p>Measure the resistance of component 1019 between the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5DN. ● Connection code 5DD. <p>The value should be approximately 40 $\Omega \pm 4 \Omega$ at 20 °C. 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 value is not correct, the solenoid valve or the electric/hydraulic interface harness is damaged.</p>
<p>Make sure that the water-oil exchanger is not blocked.</p>	

AFTER REPAIR	Repeat the conformity check from the start.
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PR007	<u>TURBINE SPEED</u>
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NOTES	There must be no present or stored faults.
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<p>Check the turbine speed sensor mounting.</p> <p>Disconnect the battery. Disconnect the modular connector, and check the cleanliness and condition of the connections.</p> <p>Disconnect the computer. Check the cleanliness and condition of the connections. Use the Universal bornier Elé. 1681 to check the insulation, continuity and the absence of interference resistance on the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5DA between components 119 and 1017. ● Connection code 5DB between components 119 and 1017. <p>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.</p> <p>Measure the resistance of component 1017 between the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5DA. ● Connection code 5DB. <p>The value should be approximately $300 \Omega \pm 40 \Omega$. 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 resistance is not correct, either the sensor or the harness is damaged. Replace the faulty component.</p> <p>If the fault is still present after the sensor has been replaced, contact your Techline.</p>
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AFTER REPAIR	Repeat the conformity check from the start.
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PR008	<u>COMPUTER SUPPLY VOLTAGE</u>
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NOTES	<p>There must be no present or stored faults. All electrical consumers switched off.</p>
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Carry out a full battery and charge circuit check (see Technical Note 6014A, Charge circuit fault finding).
<p>Disconnect the computer. Check the condition and cleanliness of the contacts.</p>
Check that the computer earth is properly connected to the vehicle's front left side member.
<p>Check the cleanliness and condition of the connections. Check the 20A permanent computer feed fuse F15 on connection BP42 in the Protection and Switching Unit. 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>Check the cleanliness and condition of the connections. Check the 5A computer after ignition feed fuse F5H on connection AP4 in the Protection and Switching Unit. 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>Disconnect the computer. Check the cleanliness and condition of the connections. Disconnect connector PPM2 in the Protection and Switching Unit. Use the Universal bornier Elé. 1681 to check the insulation, continuity and the absence of interference resistance on the following connections:</p> <ul style="list-style-type: none"> ● Connection code BP42 between components 119 and 1337. ● Connection code AP4 between components 119 and 1337. ● Connection code N between components 119 and 107. <p>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.</p>
<p>Reconnect the battery. With the ignition on, check for 12 V on component 119, between the following connections:</p> <ul style="list-style-type: none"> ● Connection code BP42. ● Connection code AP42. <p>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 12 V is not found, there is a failure in the Protection and Switching Unit. Run fault finding on the Protection and Switching Unit.</p>

AFTER REPAIR	Repeat the conformity check from the start.
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PR128	<u>ENGINE/TURBINE SPEED DIFFERENCE</u>
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NOTES	There must be no present or stored faults.
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Check gearbox oil grade and level.

If an oil change or top-up is necessary see the Draining-Filling-Levels section of the Workshop Repair Manual.

Check that the gearbox is not leaking oil.

Disconnect the battery.

Disconnect the modular connector, and check the **cleanliness and condition** of the connections.

Disconnect the computer. Check the cleanliness and condition of the connections.

Use the Universal bornier **Elé. 1681** to check the **insulation, continuity and the absence of interference resistance** on the following connections:

- **Connection code 5DA between components 119 and 1017.**
- **Connection code 5DB between components 119 and 1017.**
- **Connection code 5BX between components 119 and 754.**
- **Connection code 5BA between components 119 and 754.**

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.

Measure the resistance of component 1017 between the following connections:

- Connection code 5DA.
- Connection code 5DB.

The value should be approximately $300 \Omega \pm 40 \Omega$ at a temperature of approximately 20 °C.

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 resistance is not correct, either the sensor or the harness is damaged. Replace the faulty component.

Measure the resistance of component 754 between the following connections:

- Connection code 5BX.
- Connection code 5BA.

The value should be approximately $1 \Omega \pm 0.2 \Omega$ at 20 °C.

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 value is not correct, the solenoid valve or the electric/hydraulic interface harness is damaged.

AFTER REPAIR	Repeat the conformity check from the start.
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PR128
CONTINUED

Carry out a converter stall test.
Follow the procedure in the Converter stall test section of the Workshop Repair Manual.

See the Taking line pressure section of the Workshop Repair Manual.
Set up the pressure gauge for a line pressure reading.
Warm engine with gearbox oil temperature between **60** and **80 °C**.
Take the line pressure readings under the following conditions:
– with the gear lever in **P** or **N** and engine speed at **2000 rpm** the pressure should be between **2.6** and **3.2 bar**.
– with the gear lever at **R** and engine speed at **2000 rpm**, the pressure should be above **4 bar**.
– with the gear lever in **D** and engine speed at **2000 rpm**, the pressure in first gear should be greater than **7 bar**.
If the values are not correct, there is a fault inside the gearbox.

If the fault is still present, contact the Techline.

AFTER REPAIR

Repeat the conformity check from the start.

PR135	<u>STANDARD PEDAL POSITION</u>
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NOTES	There must be no present or stored faults.
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Run a multiplex network test (see **88B, Multiplex**).

If parameter **PR135 Standard pedal position** is absent, refer to the interpretation of the parameter (see **17B, Petrol injection** or **13B, Diesel injection**).

AFTER REPAIR	Repeat the conformity check from the start.
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PR138	<u>REFERENCE PRESSURE</u>
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NOTES	There must be no present or stored faults.
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The reference pressure is determined by the automatic transmission computer.

Check the pressure setting on the diagnostic tool:

- engine not running: pressure reading **21 bar**.
- engine at idle speed (~ **700 rpm**) and selector lever at **D** or **R**: pressure reading ~ **2.7 bar**.
- engine speed ~ **1400 rpm** and gear lever at **D** or **R**: pressure reading ~ **8.9 bar**.

AFTER REPAIR	Repeat the conformity check from the start.
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PR146	<u>DIFFERENCE BETWEEN REFERENCE PRESSURE AND OIL PRESSURE</u>
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NOTES	There must be no present or stored faults.
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The reference pressure values are stored in the transmission computer memory and depend on how the vehicle is used.

The oil pressure is regulated according to the reference pressure. The oil pressure values must always be close to the reference pressure.

This parameter is the difference between parameter **PR138 Reference pressure** and parameter **PR003 Oil pressure**.

- engine not running: reference pressure reading **21 bar**.
oil pressure reading = **0 bar**.
- engine at idle speed (~ **700 rpm**) and selector lever at **D** or **R**: reference pressure reading ~ **2.7 bar**.
oil pressure reading = ~ **2.6 bar**.
- engine speed ~ **1400 rpm** and selector lever at **D** or **R**: reference pressure reading ~ **8.9 bar**.
oil pressure reading = ~ **8.7 bar**.

AFTER REPAIR	Repeat the conformity check from the start.
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COMMANDS AND CLEARING:

Before using these clearing commands, engine and vehicle speeds must be zero and the selector lever must be in position **P** or **N**.

AC024 Sequential control of the actuators

This command activates sequence solenoid valves EVS1 to EVS6 simultaneously to check that they operate correctly.

RZ004 Fault memory

This command clears present and stored faults from the automatic transmission computer.

RZ005 Self-adapting programs

This command enables the self-adapting programming to be cleared from the automatic transmission computer, after reprogramming or after gearbox components have been replaced.
After running this command, carry out a road test with the vehicle before returning it to the customer. This is because the automatic gearbox may malfunction during the time taken for the self-adapting programs to reinstall.

RZ006 Converter lockup self-adapting program

This command clears the self-adapting programs associated with the converter.
After running this command, carry out a road test with the vehicle before returning it to the customer. This is because, after the command, the automatic gearbox may malfunction during the time taken for the self-adapting programs associated with the converter to reinstall.

RZ007 OBD memory

This command clears the computer's OBD memory.

AFTER REPAIR

Repeat the conformity check from the start.

AC024	<u>ACTUATOR SEQUENTIAL CONTROL</u>
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NOTES	<p>Check the 20A permanent computer feed fuse marked 15 in the Protection and Switching Unit. Check the cleanliness and condition of the connections. Check the 5A after-ignition computer feed fuse marked 5H in the Protection and Switching Unit. Replace the fuses if necessary. Check the cleanliness and condition of the connections.</p>
	Engine speed zero and gear lever in position P or N .

<p>If the solenoid valves are not activated, check:</p> <ul style="list-style-type: none"> – the gearbox oil level, – the cleanliness and condition of the computer connector and modular connector,
<p>Check the insulation, continuity and absence of interference resistance on the following connections:</p> <ul style="list-style-type: none"> ● Connection code 5AU between components 119 and 754. ● Connection code 5AV between components 119 and 754. ● Connection code 5AW between components 119 and 754. ● Connection code 5AX between components 119 and 754. ● Connection code 5AY between components 119 and 754. ● Connection code 5DL between components 119 and 754. ● Connection code 5DM between components 119 and 754. ● Connection code 5BA between components 119 and 754. ● Connection code 5AZ, between components 119 and 754. ● Connection code 5DD between components 119 and 1019. ● Connection code 5DN between components 119 and 1019.
If the fault is still present, contact the Techline.

AFTER REPAIR	Repeat the conformity check from the start.
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NOTES

Only refer to Customer complaints after carrying out a complete fault finding procedure with the diagnostic tool and the conformity check.

NO DIALOGUE WITH THE COMPUTER

ALP1

ENGINE STARTING FAULTS

ALP2

AUTOMATIC TRANSMISSION OPERATING FAULTS

ALP3

AUTOMATIC TRANSMISSION MALFUNCTIONING ON
GEAR CHANGING

ALP4

ERRATIC GEAR CHANGES

ALP5

REVERSING LIGHTS DO NOT WORK

ALP6

OIL UNDER THE VEHICLE

ALP7

NO GEAR LEVER LOCK IN POSITION

ALP8

GEAR LEVER JAMMED IN "PARK" POSITION (CANNOT
UNLOCK BY DEPRESSING THE BRAKE PEDAL)

ALP9

ALP1	No dialogue with the computer
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NOTES	None.
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Try the diagnostic tool on another vehicle.

Check:

- the connection between the diagnostic tool and the diagnostic socket (connection and cable in good condition),
- the power supply to the computer,
- the engine and passenger compartment fuses.

Check that the **CLIP** sensor is supplied by connections BP32, MAN and NAM of component 225, displayed when both red indicator lights on the sensor illuminate.

Make sure that the **CLIP** sensor is connected to the computer's USB port.

Make sure the **CLIP** sensor is communicating properly with the vehicle's computers; this can be seen by the two green diodes on the sensor lighting up.

Check the following connections on component 225:

- Connection code AP43 (+ after ignition feed).
- Connection code BP32 (+ battery).
- Connection code MAN (earth).

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

No communication on line K

Check the **continuity**, **insulation** and **absence of interference resistance** on line **K** of the diagnostic socket.

Disconnect the automatic transmission computer connector to check **the insulation, continuity and the absence of interference resistance** of the following connections:

- **Connection code AP4 between components 119 and 1337.**
- **Connection code BP42 between components 119 and 1337.**
- **Connection code N between components 119 and 107.**
- **Connection code 3HK between components 119 and 225.**

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

If the fault is still present, contact the Techline.

AFTER REPAIR	Carry out a road test followed by a complete check with the diagnostic tool.
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AUTOMATIC TRANSMISSION

Fault finding – Fault Finding Chart

23A

ALP2	Engine starting faults
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NOTES	Only refer to Customer complaints after carrying out a complete fault finding procedure with the diagnostic tool and the conformity check.
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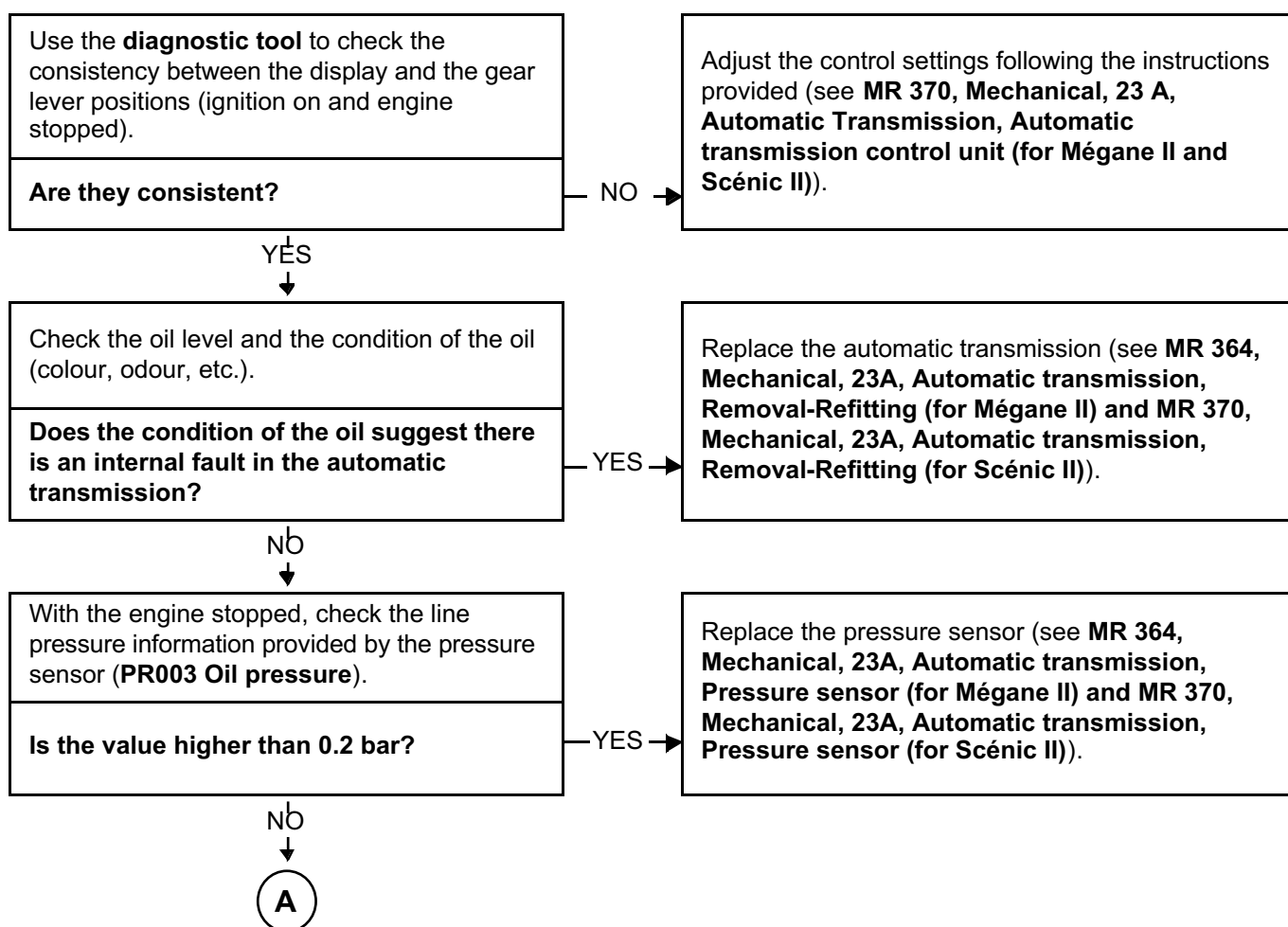
Make sure that the diagnostic tool report, gear lever positions and instrument panel all indicate the same gear engaged. Adjust the gear lever cable if it is faulty.
The engine will only start when the gear lever is in the P or N position.
Check the battery charge and the condition of the terminals (oxidation). Check the multifunction switch mounting and that it is working. Check the gear lever control cable and adjust if necessary (see MR 364 Mechanical, 23A, Automatic transmission, Filling-Levels (for Mégane II) and MR 370 Mechanical, 23A, Automatic transmission, Draining-Filling (for Scénic II)).
Ensure that the ignition switch is working properly.
Check the power circuit of the starter relay and the starter.
Carry out fault finding on the injection system.
If the engine still doesn't start, contact the Techline.

AFTER REPAIR	Carry out a road test followed by a complete check with the diagnostic tool.
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ALP3	Automatic transmission operating faults
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NOTES	<p>Only refer to Customer complaints after carrying out a complete fault finding procedure with the diagnostic tool and the conformity check.</p> <p>If the engine races when shifting from 1/2 when cold (automatic transmission oil temperature lower than 15°C), replace the pressure modulating solenoid valve (EVM).</p>
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Start with the ALP1 cycle



AFTER REPAIR	Carry out a road test followed by a complete check with the diagnostic tool.
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ALP3 CONTINUED 1	
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A



Check the oil level.

Check the oil pressure value using **PR003 Oil pressure**:

Warm engine with gearbox oil temperature between 65 and 90°C.

Measure the line pressure under the 3 following conditions:

Important

The vehicle must be stationary: handbrake on and brake pedal depressed, no accessories operating (e.g.: air conditioning)

1 engine speed idling:

Shift the gear lever to **R**, **N** and **D**, the pressure reading must be greater than **2.5 bars**.

2 engine speed at 1200 rpm:

- gear lever in **R** position, the pressure reading must be greater than **4 bars**.
- gear lever in **D** position, the pressure reading in first gear must be greater than **5.5 bars**.

3 engine speed at 2200 rpm:

- gear lever in **R** position, the pressure reading must be greater than **11 bars**.
- gear lever in **D** position, the pressure reading in first gear must be greater than **11 bars**.

Do the recorded values correspond to the specified values?

YES



Shift the gear lever into position **D** and monitor **PR007 Turbine speed** when accelerating.

Does the turbine speed change?

NO



B

NO



Replace the pressure modulating solenoid valve and the oil. Repeat the check after replacement.
If the fault is still present, replace the hydraulic distributor and all the solenoid valves (see **MR 364 Mechanical, 23A, Automatic transmission, Hydraulic distributor (for Mégane II)** and **MR 370 Mechanical, 23A, Automatic transmission, Hydraulic distributor (for Scénic II)**).

YES



Replace the automatic transmission (see **MR 364, Mechanical, 23A, Automatic transmission, Removal-Refitting (for Mégane II)** and **MR 370, Mechanical, 23A, Automatic transmission, Removal-Refitting (for Scénic II)**).

AFTER REPAIR

Carry out a road test followed by a complete check with the diagnostic tool.

ALP3 CONTINUED 2	
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Refer to the procedure and the safety instructions for carrying out a setting point check on the torque converter. Theoretical engine speed at setting point: 2300 ± 150 rpm
Is the value of the setting point wrong or is there an internal noise in the converter?

NO
↓

Carry out a road test, observing the engine speed on the instrument panel and the information displayed on the diagnostic tool (PR006 Engine speed)
Does the engine speed change each time there is a gear change?

YES
↓

The checks carried out have not provided any evidence of a fault and the automatic transmission appears to be working correctly. If the vehicle does show the customer complaint selected, continue with the entire fault finding procedure.
--

YES
↓

Replace the torque converter, the lock-up solenoid valve and the oil. If the oil is burnt, also replace the hydraulic distributor and all the solenoid valves (see MR 364 Mechanical, 23A, Automatic transmission, Hydraulic distributor (for Mégane II) and MR 370 Mechanical, 23A, Automatic transmission, Hydraulic distributor (for Scénic II)). When replacing the torque converter, ensure that the reaction shaft is securely attached to the hub of the oil pump (flanged shaft). Note: A setting point which is too low may be due to a lack of engine power.
--

NO
↓

Replace the hydraulic distributor and all the solenoid valves. (see MR 364 Mechanical, 23A, Automatic transmission, Hydraulic distributor (for Mégane II) and MR 370 Mechanical, 23A, Automatic transmission, Hydraulic distributor (for Scénic II)).
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AFTER REPAIR	Carry out a road test followed by a complete check with the diagnostic tool.
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ALP4	Automatic transmission malfunctioning on gear changing
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NOTES	Only refer to Customer complaints after carrying out a complete fault finding procedure with the diagnostic tool and the conformity check.
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Automatic gearbox malfunctions may be noted during gear changing without any fault being stored in the computer. These malfunctions may be linked to:

- connection problems (**insulation**: generates a fault, **resistance**) in the sequence solenoid valve control wiring harnesses (**EVS1* to EVS6***).

Check the tightness and condition of the clips on all the solenoid valve control wiring connections from the computer to each solenoid valve.

If the fault is still present, contact Techline.

* EVS: Sequence solenoid valves.

AFTER REPAIR	Carry out a road test followed by a complete check with the diagnostic tool.
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ALP5	Erratic gear changes
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NOTES	Only refer to Customer complaints after carrying out a complete fault finding procedure with the diagnostic tool and the conformity check.
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Carry out a road test using the diagnostic tool, making sure that status ET013 Gear engaged operates normally.
If the customer complaint occurs with the brake pedal released, check that status ET004 Brake light switch (Closed) is NO . If not, adjust the brake light switch and the brake pedal.
Make sure that the instrument panel display of the gear engaged matches the gear lever position.
Check the automatic transmission wiring harness (sequence solenoid valve control). Replace it if necessary.
Check that the gear lever cable is working properly and adjust it if necessary. Check that the multifunction switch is working correctly. If the fault is still present, replace the multifunction switch.
Carry out fault finding on the injection system.
Check engine speed signal PR006 during a road test at a steady speed. If the signal is wrong, replace the engine speed sensor.

AFTER REPAIR	Carry out a road test followed by a complete check with the diagnostic tool.
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ALP6	Reversing lights do not work
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NOTES	Only refer to Customer complaints after carrying out a complete fault finding procedure with the diagnostic tool and the conformity check.
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Check:

- the condition of the fuses in the UPC.
- the condition of the bulbs.
- the condition of the bulb contacts. Repair if necessary.
- Check that the earth is present for the following connections:

- **Connection code MAQ of component 172.**
- **Connection code MZ of component 173.**

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.

Switch off the ignition and disconnect the modular connector.

Switch on the ignition again and check for **+ 12 V after ignition feed on connection AP11 of component 485.**

Switch off the ignition and check the continuity on the following connections, with the gear lever in position **R**:

- Connection code H66P between components 485 and 1337.
- Connection code AP11 between components 485 and 1337.

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

Check that the gear lever cable is correctly adjusted and check the instrument panel display.

If the continuity is faulty, replace the multifunction switch.

Switch on the ignition.

With the gear lever in position **R**, check for **+ 12 V after ignition feed** on the following connections:

- **Connection code H66P between components 172 and 1337.**
- **Connection code H66P between components 173 and 1337.**

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

AFTER REPAIR	Carry out a road test followed by a complete check with the diagnostic tool.
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ALP7	Oil present under vehicle
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NOTES	Only refer to Customer complaints after carrying out a complete fault finding procedure with the diagnostic tool and the conformity check.
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<p>Check the colour of the oil under the vehicle to determine the source of the leak (automatic transmission fluid is red). Clean the engine and gearbox.</p>
<p>Check the oil level in the engine and gearbox. Top up if necessary (see MR 364 Mechanical, 23A, Automatic transmission, Filling-levels (for Mégane II) and MR 370 Mechanical, 23A, Automatic transmission, Draining-Filling (for Scénic II)).</p>
<p>If there is no gearbox leak, look for a leak in the engine compartment. If the leak is from the gearbox side:</p> <ul style="list-style-type: none"> – Locate the source of the leak and carry out the necessary repairs. – Replace any faulty parts. – Check the oil level.

AFTER REPAIR	Carry out a road test followed by a complete check with the diagnostic tool.
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ALP8	No gear lever lock in P position
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NOTES	Only refer to Customer complaints after carrying out a complete fault finding procedure with the diagnostic tool and the conformity check.
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If no fault can be identified in the shift-lock electromagnet, check the operation of the stop light switch.
Use the interpretation of fault **DF119 Brake pedal position** and status **ET003 Brake light switch**.

If the customer complaint is continues, look for a mechanical fault on the lever locking mechanism.

AFTER REPAIR	Carry out a road test followed by a complete check with the diagnostic tool.
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ALP9	Gear lever stuck at P (Unlocking impossible)
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NOTES	Only refer to Customer complaints after carrying out a complete fault finding procedure with the diagnostic tool and the conformity check.
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If no fault can be identified in the shift-lock electromagnet, check the operation of the stop light switch.
Use the interpretation of fault **DF119 Brake pedal position** and status **ET003 Brake light switch**.

If the customer complaint is continues, look for a mechanical fault on the lever locking mechanism.

AFTER REPAIR	Carry out a road test followed by a complete check with the diagnostic tool.
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AUTOMATIC TRANSMISSION

Fault finding – Tests

23A

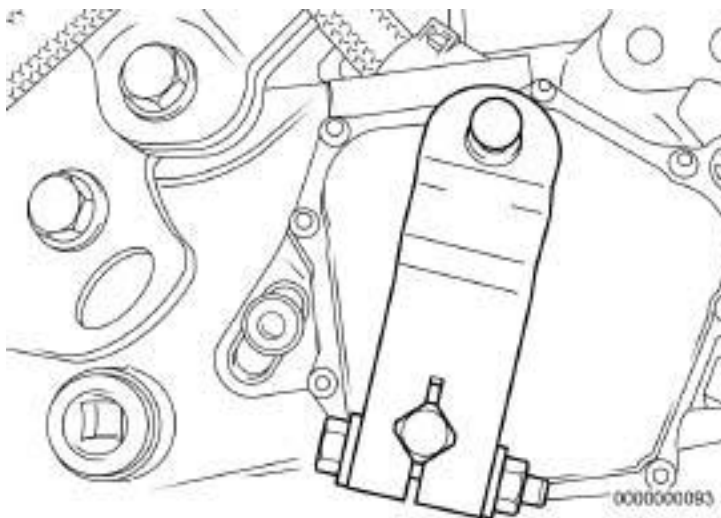
Checking the gearbox output lever clearance

TEST 1

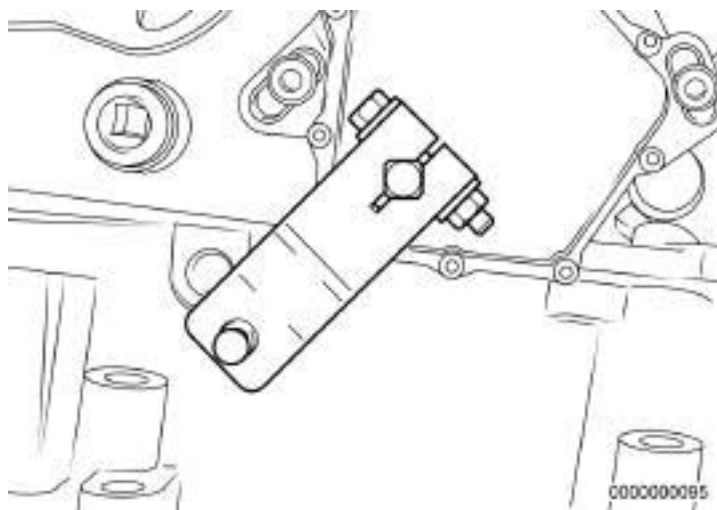
TEST 1

Checking the gearbox output lever clearance

For a normal lever: check the play in the ball detent of fixed 1st gear. There must be little or no lever clearance in this position.



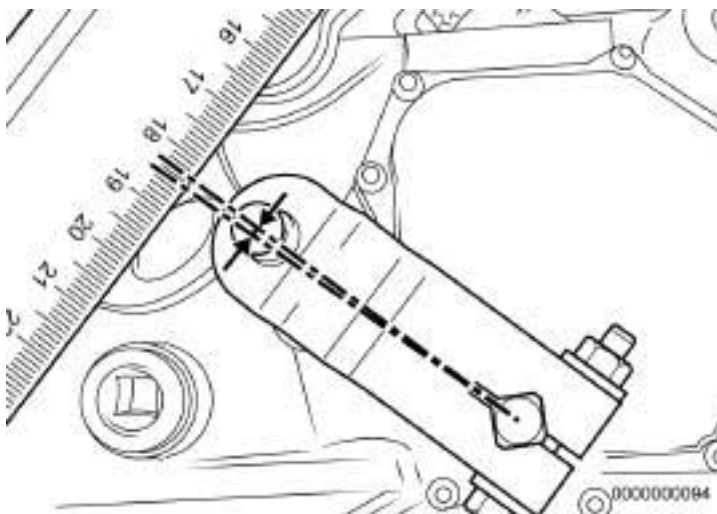
For an inverted lever: check the play in the ball detent of fixed 1st gear. There must be little or no lever clearance in this position.



TEST 1 CONTINUED

Normal lever:

Check the clearance in the Park position. Clearance must be **approximately 1.5 mm** (measured at the ball joint).



Inverted lever:

Check the clearance in the Park position. Clearance must be **approximately 1.5 mm** (measured at the ball joint).

