



Technical Note 3877A

XBXX

Fault finding

Changes to Clio phase 2 and phase 3

77 11 332 642

OCTOBER 2006

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

The whole of this Technical Note applies to the Clio II *phase 3*.

On the Clio II *phase 2* the only applicable sections are those for Electric Power Steering (EPS), Electronic Stability Program (ESP), and the multiplex system test.

2. EXPLANATION OF THE CHANGES

N.B.

Only the instrument panel has been completely reworked in phase 3.

It still cannot be tested with the CLIP tool. However, electronic repair operations must be carried out via the Connection Unit (BIC).

The fault finding procedure for the new instrument panel is given in the following pages, in subsection 83A.

Other slight changes in fault finding procedures for Clio phases 2 and 3 relate to the following areas:

- For phase 3: Multiplex system test, Passenger Compartment Control Unit (UCH), Air conditioning, ESP.
- For phase 2: EPS, ESP, and multiplex system test.

3. MULTIPLEX SYSTEM TEST (applies to phases 2 and 3)

Vehicles fitted with ESP **must** have a steering wheel angle sensor connected to the **multiplex system**. But the steering wheel angle sensor is **never** seen on the multiplex system test screen: therefore it is quite normal not to see it even if it is present on the vehicle and it is operating correctly.

4. CONNECTION UNIT (BIC) (applies to phase 3 only)

New configurations relating to the instrument panel are being issued: see **83A, Instrument panel, Configuration and programming**.

5. AIR CONDITIONING (applies to phase 3 only)

The interior air temperature sensor no longer has a micro-turbine.

Ignore the micro-turbine when using MR **346, 62B, Climate control** for:

- dealing with fault **DF007 "Interior temperature sensor circuit"**,
- the micro-turbine conformity check (**PR001 "Interior temperature"**),
- the use of the following fault finding charts (LAP):

Fault Finding Chart 6 "No heating or insufficient heating"

Fault Finding Chart 7 "Too much heat"

Fault Finding Chart 8 "No cold air"

Fault Finding Chart 9 "Too cold"

6. ELECTRONIC STABILITY PROGRAM (ESP) (applies to phases 2 and 3)

If the computer is replaced or the intervention of the ESP is considered erratic, it is imperative to reprogram the steering wheel angle sensor to reset the offset to zero.

7. ELECTRIC POWER STEERING (applies to phases 2 and 3)

This section shows how to update the criteria for programming the rate of assistance in **MR 346, 38C, Electric power steering**.

Computer configuration:

Configuration is carried out using command **CF088 "Computer calibration"**.

- **The default level of assistance for computer 45A is "0"**.
- Computer 60A contains four different levels of assistance. Select the correct level of assistance when replacing the computer (see **Programmed assistance level value**).

The computer is supplied with default level of assistance "0".
It is impossible to calibrate the computer if the vehicle is not stationary.

Note:

An incorrect level of assistance may cause the function to break down.

After the level of assistance has been calibrated (see **Programmed assistance level value**), check that this has been done correctly by interpreting the value of the "CALIBRATION NUMBER" on the "COMPUTER IDENTIFICATION" screen. The first two figures indicate the type of computer (45 or 60 A) and the last two figures indicate the level of assistance.

Examples:

- for a 45 A computer, the "CALIBRATION NUMBER" is 4500,
- for a 60 A computer with an assistance level value of 3, the "CALIBRATION NUMBER" will be 6003.

INTRODUCTION TO FAULT FINDING

Changes

01E

PROGRAMMED ASSISTANCE LEVEL VALUE

Equipment level	Computer type	Engine				
		D4F & D7F	K4J	K9K 55, 65 and 90 bhp	K9K 100 bhp	K4M
E0	45 A					
	60 A			0		
E1	45 A	0				
	60 A		0	0	0	8200149673: 3 8200222352: 3 8200265136: 0
E2	45 A	0				
	60 A		0	0	0	
E3	45 A	0				
	60 A	0	0	0	0	8200149673: 3 8200222352: 3 8200265136: 0
E5	45 A	0				
	60 A		0	0	0	8200149673: 3 8200222352: 3 8200265136: 0
ES	45 A	0				
	60 A	0	8200149673: 3 8200222352: 3 8200265136: 0	8200149673: 3 8200222352: 3 8200265136: 0	0	8200149673: 3 8200222352: 3 8200265136: 0
Driving school except Spain and Portugal	45 A					
	60 A	8200149673: 2 8200222352: 2 8200265136: 1		8200149673: 2 8200222352: 2 8200265136: 1		
Driving school Spain and Portugal only	45 A					
	60 A	2		2		
With aluminium wheels	45 A					
	60 A	8200149673: 2 8200222352: 2 8200265136: 1		0	0	8200149673: 3 8200222352: 3 8200265136: 0

Examples of how to use the table:

- with a D4F engine and equipment level E3, level 0 is assigned to a 60 A computer, or a 45 A computer could also be fitted (default level 0),
- with a K4M engine and equipment level E3, level 0 is assigned to a 60 A computer if the computer part number is 8 200 265 136, level 3 is assigned to a 60 A computer if the computer part number is 8 200 149 673 or 8 200 222 352.

INSTRUMENT PANEL

Fault finding - Introduction

83A

1. SCOPE OF THIS DOCUMENT

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

Vehicle(s): **Clio II Phase 3 (except RS)**
Function concerned: **Instrument panel**

2. PREREQUISITES FOR FAULT FINDING

Documentation type

Fault finding procedures (this manual):

- Assisted fault finding (integrated into the diagnostic tool), paper version (Workshop Repair Manual or Technical Note) and Dialogys.

Wiring diagrams:

- Visu-Schéma (CD-ROM), paper version.

Type of diagnostic tools

- CLIP

Special tooling required

Special tooling required
Multimeter
Universal bornier

3. RECAP

Procedure

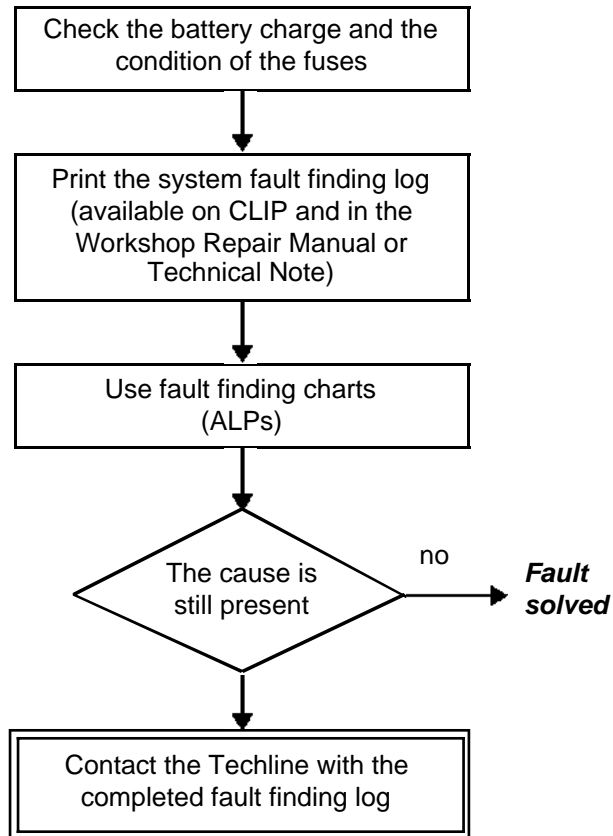
To perform fault finding on the vehicle's computers, switch on the ignition in fault finding mode.

Customer complaints - Fault finding chart

As the RENAULT diagnostic tool cannot be used to carry out fault finding on the instrument panel computer, fault finding is carried out using customer complaints and fault finding charts.

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

4. FAULT FINDING PROCEDURE



INSTRUMENT PANEL

Fault finding - Introduction

83A

4. FAULT FINDING PROCEDURE (continued)

Wiring check

Fault finding problems

Disconnecting the connectors and/or manipulating the wiring harness may temporarily remove the cause of a fault. Electrical measurements of voltage, resistance and insulation are generally correct, especially if the fault is not present when the analysis is made (stored fault).

Visual inspection

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

Tactile inspection

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

Inspection of each component

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

Resistance check

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

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

5. FAULT FINDING LOG



IMPORTANT!

IMPORTANT

Any fault on a complex system requires thorough fault finding with the appropriate tools. The FAULT FINDING LOG, which should be completed during the procedure, enables you to keep track of the procedure which is carried out. It is an essential document when consulting the manufacturer.

IT IS THEREFORE MANDATORY TO FILL OUT A FAULT FINDING LOG FOR EACH FAULT FINDING PROCEDURE.

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 whenever work is carried out on a component to prevent physical damage or human injury:

- make sure that the battery is properly charged to avoid damaging the computers with a low load,
- use the appropriate tools.

INSTRUMENT PANEL

Fault finding - Introduction

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7. SELF-TEST FUNCTION:

Testing the various display devices consists of:

- activating the needle indicators,
- activating the warning lights (warning lights controlled in a self-diagnostic sequence, see below),
- activating the internal audible warning on the instrument panel,
- testing the bargraph display.

WARNING

It is essential to run an instrument panel self-diagnostic sequence to check the proper operation of the indicators and warning lights.

The warning lights controlled during the sequence are:

- status of doors,
- severity level 1 and 2 injection faults,
- airbag,
- airbag off,
- de-icing,
- low fuel level,
- preheating,
- emission control (OBD),
- STOP,
- SERVICE,
- cruise control,
- Anti-lock Braking System,
- Electronic Stability Program,
- LPG,
- power assisted steering.

Failure of any of the warning lights requires the instrument panel to be replaced.

IMPORTANT

Warning lights which are controlled via a wire connection (conventional control by means of a wire connecting the warning light to the computer) are not tested by the instrument panel.

To test these, use a diagnostic tool (CLIP or NXR) and use command mode "**fault warning light test**" for the computer controlling the warning light being checked.

INSTRUMENT PANEL

Fault finding - Introduction

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ACCESS TO FAULT FINDING MODE AND CHANGE OF PAGES

This function is viewed:

Version without trip computer

Input:

- By pressing the mileometer Reset button for **5 s** when switching on the APC.

Scrolling:

- Information on the bargraph display scrolls automatically, timed at **5 seconds** per page.

Output:

- Automatic exiting of the fault finding phase after **5 minutes**.

or

- The fault finding phase can be ended by pushing the mileage counter reset button, and this manipulation clears the stored faults.

Version with trip computer

Input:

- By pressing the scrolling button (earth on the track when **APC** is switched on, and it is immediately taken into account).

Scrolling:

- The information on the bargraph display scrolls by successively pressing the trip computer scrolling button.

Output:

- Automatic exiting of the fault finding phase after **5 minutes**.

or

- The fault finding phase can be ended by pushing the mileage counter reset button, and this manipulation clears the stored faults.

DESCRIPTION OF THE NEEDLE INDICATOR TEST SEQUENCE

The needle indicators are activated at the same time.

The speedometer displays for **1 second** in **24 mph (40 km/h)** stages, speeds ranging from **0 to 150 mph (240 km/h)**.

The rev counter displays for **1 s** in **1000 rpm** stages, values ranging from **0 to 5000 or 7000 rpm** depending on the type of instrument panel.

INSTRUMENT PANEL

Fault finding - Introduction

83A

DISPLAY OF LCD PAGES AND FAULT FINDING HELP

First page: all the segments are lit.

Second page: "**display the number of litres**" or, "**CO**" or "**CC**" depending on the type of fault present.

Third page: "**fuel flow rate in litres/hour**" or "**d**" indicating a present fuel flow fault.

Fourth page: the "oil level sensor" fault (**present** or **stored**) is displayed as an "**h**" followed by "**CO**" or "**CC**" depending on the type of fault,

the stored "fuel tank sender" fault is displayed as a "**j**" followed by "**CO**" or "**CC**" depending on the type of fault, the stored "fuel flow rate" fault is displayed as a "**d**" only.

If no fault is **present** then **dashes are displayed**.

Exit from the self-test sequence by pressing the mileometer Reset button. This action clears the stored faults.

In fault finding mode, the "sensor" (fuel sender, flow) faults are not under surveillance, stored or dynamically displayed.

For the oil level sensor, the test and the storing of any fault is carried out when the **APC** is switched on before the self-test sequence is run.

FAULT FINDING LOG
<div style="display: flex; justify-content: space-between;"> System: Instrument panel Page 1/2 </div>

System: Instrument panel

Page 1/2

List of monitored parts: **Computer**

- **Administrative identification**

Date _____

				2	0		
--	--	--	--	---	---	--	--

Log completed by

[illegible]

VIN

[illegible]

Engine

Diagnostic tool

CLIP	
------	--

Update version

- **Customer complaint**

	1188	Faulty fuel level display
--	------	---------------------------

	1156	Faulty coolant temperature display
--	------	------------------------------------

	1187	Digital display: faulty text/image
--	------	------------------------------------

	1185	Faulty speedometer
--	------	--------------------

	1157	Warning lights fail to come on
--	------	--------------------------------

	1186	Faulty tachometer
--	------	-------------------

	1190	Faulty trip computer displays
--	------	-------------------------------

Other

Your comments

- **Conditions under which the customer complaint occurs**

	011	When ignition is switched on
--	-----	------------------------------

	005	While driving
--	-----	---------------

	004	Intermittently
--	-----	----------------

	009	Sudden fault
--	-----	--------------

	010	Gradual deterioration
--	-----	-----------------------

Other

Your comments

- **Documentation used for fault finding**

Fault finding procedure used		
Type of diagnostic manual:	Workshop Repair Manual <input type="checkbox"/> Technical Note <input type="checkbox"/> Assisted fault finding <input type="checkbox"/>	
Fault finding manual no:		
Wiring diagram used		
Wiring Diagram Technical Note No:		
Other documentation		
Title and/or part number:		



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FD 10

Fault finding log

FAULT FINDING LOG

System: Instrument panel

Page 2/2

● Identification of computer and system parts exchanged

Part 1 part no.	
Part 2 part no.	
Part 3 part no.	
Part 4 part no.	
Part 5 part no.	

To be read with the diagnostic tool (Identification screen):

Computer part no.	
Supplier no.	
Program no.	
Software version	
Calibration number	
VDIAG	

● Faults found with the diagnostic tool

Fault no.	Present	Stored	Fault name	Specification

● Conditions under which fault occurs

Status or parameter no.	Parameter name	Value	Unit

● System-specific information

Description:

● Additional information

What factors led you to replace the computer?

What other parts were replaced?

Other defective functions?

Your comments:



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FD 10
Fault finding log

INSTRUMENT PANEL

Fault finding - System operation

83A

1. OPERATION OF THE NEEDLE INDICATORS

Speedometer

The vehicle speed signal is transmitted to the instrument panel by a wire link.
The signal is supplied either by a sensor in the gearbox or by the ABS computer.
The instrument panel makes this signal available on the multiplex network.

Note:

The speedometer needle stays at zero until the instrument panel has been configured.

Engine speed indicator

This indicator is controlled by the multiplex network (signal produced by the injection computer).

2. OPERATION OF THE BARGRAPH DISPLAY

Coolant temperature bargraph

The coolant temperature information is sent via the multiplex network (signal produced by the injection computer).
Above **115 °C** (inclusive), all the segments are illuminated.
From **105 °C** (inclusive) to **115 °C** (not inclusive), six segments are lit.
From **75 °C** (inclusive) to **105 °C** (not inclusive), four segments are lit.
None of the segments are lit at a temperature below **75 °C**.

Fuel level bargraph and low fuel level warning light

The separate "**low fuel level**" warning light comes on when the reserve level is reached and nine segments of the bargraph are extinguished. The fuel level calculation and warning light management are provided by processing the fuel flow signal (signal from the injection computer via the multiplex network), and the fuel sender wire signal for updating.

SPECIAL NOTE ABOUT OPERATION WHEN THE IGNITION IS SWITCHED ON:

A **3 second** self-test is run on the "fuel level low" warning light, when the ignition is switched on.

Case 1: if the fuel tank sender is connected but the fuel level in the tank is below the reserve level, the warning light remains lit and all the segments of the bargraph are extinguished.

Case 2: if the fuel tank sender is not connected and the ignition is switched on for the first time when the fault is present, after about **40 s** (time taken to detect a fault), the "**low fuel level**" warning light illuminates, then after **1 minute 20 s**, all the segments of the bargraph flash.

Case 3: if the fuel tank sender is not connected and the fault was already present before the ignition was switched on, the "**low fuel level**" warning light remains lit, then after **1 min. 20 s**, all the bargraph segments flash.

INSTRUMENT PANEL

Fault finding - System operation

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Oil level indicator

This function is displayed for approximately **30 seconds** when the ignition is switched on or after the engine is started.

If the level is between the permitted maximum and minimum, the display shows "**oil OK**".

If pressure is kept for **30 seconds** on the "**Reset**" button or "**trip computer scrolling**", blocks symbolising the oil level appear on the display.

They disappear gradually as the oil level drops and are replaced by dashes.

If the level is low when the ignition is switched on, the message "**oil**" will flash for **30 seconds**. The "service" warning light remains lit after the engine starts.

Notes:

- Under normal operating conditions, the oil level is only measured if the ignition has been switched off for more than **1 minute**, otherwise the old oil level value is redisplayed.
- However, when a fault in the sender is detected, the display switches directly to the total mileage function when the ignition is switched on.
- It is normal for the level to vary: Various parameters may be involved:
 - parking on a slope,
 - too short a wait after running the engine for a short time (especially when the oil is cold), etc.

3. ODOMETER

Total mileage

The total mileage will be displayed approximately **30 seconds** after the ignition is switched on (after the oil level signal). Pressure on the "**trip computer scrolling**" or "**Reset**" button is for reducing the waiting time.

Trip mileage

The trip meter is displayed instead of the total mileage when the "**trip computer scrolling**" or "**Reset**" button is pressed briefly.

Except in the following case:

- Configuration without clock: Total and trip mileages are displayed one above the other.

It is reset by pressing and holding the "**Reset**" button (except in the case of configurations without clock where a brief press is sufficient). Resetting the trip mileage is different from resetting the **trip computer** (distance travelled).

Trip computer

The various sequences of the trip computer can be displayed instead of the mileage by pressing the button on the end of the wiper stalk ("**Trip computer sequence**" button). It is reset by briefly pressing the "**Reset**" button.

The signals from the trip computer are displayed after the trip mileage as follows:

- **Fuel consumed** (in litres per 100 km or MPG) since the last time the reset button was pressed.
- **Average consumption** (in litres per 100 km or MPG) since the last time the reset button was pressed.

This is only displayed after the vehicle has travelled **400 metres**.

This takes into consideration the distance travelled and the fuel consumption since the last reset.

- **Current fuel consumption** (litres/100 km)

INSTRUMENT PANEL

Fault finding - System operation

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This is only displayed when the vehicle speed is above approximately **20 mph (30 km/h)**.
Under no load conditions at a vehicle speed greater than **18 mph (30 kph)**, the current consumption is equal to **0**.

Note:

This function is not available on the UK version.

Estimated range with remaining fuel (km or miles).

This is only displayed after the vehicle has travelled approximately **400 metres**. This is the potential distance remaining calculated by taking into account the distance travelled, the amount of fuel remaining in the tank and the fuel consumed.

Note:

When the low fuel level warning light is lit up, the range is not displayed.

- **Distance travelled** since the last reset
- **Average speed** since the last reset

This is displayed after the vehicle has travelled **400 m**. This is obtained by dividing the distance travelled by the time elapsed since the last reset. The time base is in the trip computer.

Oil service interval

Informs the driver of the distance (in **km** or **miles**) that can be travelled before the next oil change.

Note:

If the trip computer displays flashing dashes, it has detected a fault. Consult the fault finding mode (see **Introduction**).

THE BUZZER INDICATES:

- the direction indicators are operating,
- "lights on" reminder when a door is opened,
- Renault anti-intruder device (RAID) activated or deactivated,
- speeding (Saudi Arabia),
- the low fuel level warning light comes on.

THE 'SERVICE' WARNING LIGHT LIGHTS OUT AT THE SAME TIME AS THE FOLLOWING WARNING LIGHTS:

- anti-lock braking system,
- airbag.

ONLY THE 'SERVICE' WARNING LIGHT IS LIT:

- flashing mode: instrument panel not configured,
- continuously lit: oil level low.

THE 'STOP' WARNING LIGHT LIGHTS UP AT THE SAME TIME AS THE FOLLOWING WARNING LIGHTS:

- oil pressure,
- brake fault,
- electronic brake force distribution,
- severity level 2 injection fault,
- high coolant temperature.

INSTRUMENT PANEL

Fault finding - System operation

83A

IMPORTANT

If an instrument panel **indicator or warning light controlled by the multiplex system** is faulty, consider whether the data has been correctly transmitted via the multiplex network, as it is transmitted with several other bits of data in the same message.

Either the instrument panel indicator is faulty, or the message is wrong.

- The message may be wrong due to incorrect interpretation by the transmitter computer (e.g. faulty coolant temperature sensor) or a fault inside the transmitter computer.
- Using the table on the next page, isolate the computer transmitting the data and in the first instance carry out a **full fault finding sequence** on this before taking any action on the instrument panel.

INSTRUMENT PANEL

Fault finding - System operation

83A

Warning light		Controlled by the multiplex system	Control	Tested	Signal transmitter
1	Opening elements	YES	Earth	NO	UCH
2	Dipped headlights	NO	+ 12 V	NO	Lighting stalk
3	Main beam headlights	NO	+ 12 V	NO	Lighting stalk
4	Rear fog lights	NO	+ 12 V	NO	Lighting stalk
5	Front fog lights	NO	+ 12 V	NO	Lighting stalk
6	Left-hand direction indicator lights	NO	+ 12 V	NO	UCH
7	Right-hand direction indicator lights	NO	+ 12 V	NO	UCH
8	Battery charge fault	NO	Earth	NO (but lit when engine switched off)	Alternator
9	Injection fault severity 2 Coolant temperature	YES	Earth	3 seconds Instrument panel	Injection
10	Oil pressure alert	NO	Earth	3 seconds Instrument panel	Oil pressure sensor
11	Handbrake on and fault detected on the brake circuit	NO	Earth	3 seconds via ABS	<ul style="list-style-type: none"> – Handbrake switch – Brake fluid low switch – Electronic Braking Distribution
12	ABS system (active)	NO	Earth	3 seconds via ABS	ABS
13	Airbag	YES	Earth	3 seconds Instrument panel	Airbag
14	Airbag Off	YES	Earth	NO (lit when function is activated)	Airbag
15	Heated rear screen	YES	Earth	NO (lit when function is activated)	UCH
16	Minimum fuel level alert	NO/YES (LPG)	Earth	3 seconds Instrument panel	Instrument panel management (fuel flow signal + tank sender signal)
17	Injection fault severity 1 Diesel preheating	YES	Earth	3 seconds Instrument panel or preheating	Injection

INSTRUMENT PANEL

Fault finding - System operation

83A

Warning light		Controlled by the multiplex system	Control	Tested	Signal transmitter
18	OBD	YES	Earth	3 seconds Instrument panel	Injection
19	Engine immobiliser	NO	Earth	NO	UCH
20	Automatic transmission (built into the bargraph display)	YES	Earth	3 seconds Instrument panel	Automatic gearbox connection
21	STOP	YES/NO	Earth	3 seconds Instrument panel	Instrument panel management, depending on other warning lights
22	SERVICE	YES/NO	Earth	3 seconds Instrument panel	Instrument panel management, depending on other warning lights
23	Cruise control/Speed limiter	YES	Earth	NO (lit when function is activated)	Injection
24	ESP	YES	Earth	NO	ABS/ESP
25	LPG	YES	Earth	NO	Injection
26	Seat belt unfastened reminder	NO	Earth	NO (lit when function is activated)	Seat belt switch
27	Electric power assisted steering	NO	Earth	3 seconds EPS computer	DAE

INSTRUMENT PANEL

Fault finding - Allocation of computer tracks

83A

CONNECTOR (30 tracks)

Track	Description
1	Left-hand direction indicator
2	Right-hand direction indicator
3	Main beam headlights
4	Dipped headlights
5	Rear fog lights
6	Front fog lights
7	ABS (active)
8	Electric power assisted steering
9	Not used
10	Not used
11	Not used
12	Not used
13	Not used
14	Not used
15	Not used
16	Not used
17	CAN Low 1 (L1) to UCH
18	CAN Low 1 (L1) to UCH
19	Not used
20	Engine immobiliser
21	Electronic brake distribution function on rear brake (or earth if no ABS)
22	Brake fault
23	Parking brake
24	+ Oil level sensor
25	Oil level sensor
26	- Fuel sender probe
27	+ Fuel sender probe
28	Lighting dimmer earth
29	Battery charge
30	Not used

INSTRUMENT PANEL

Fault finding - Allocation of computer tracks

83A

CONNECTOR (15 tracks)

Track	Description
1	+ battery feed
2	+ After ignition feed
3	+ Side light
4	General earth
5	Not used
6	Not used
7	Not used
8	Service warning light
9	Not used
10	Not used
11	Oil pressure switch
12	Seat belt warning light
13	Driving assistance scroll button
14	Vehicle speed signal
15	Not used

INSTRUMENT PANEL

Fault finding - Replacement of components

83A

1. System replacement, programming, or reprogramming operations:

The system cannot be programmed or reprogrammed.

If the instrument panel is replaced, carry out the configurations (see "**Configuration and programming**").

- Carry out fault finding before replacing the instrument panel.
- Fitting the part (see mechanical Repair Manual).

- It may be replaced when the Techline has given its approval.

WARNING

Never exchange instrument panels from one vehicle to another and **never fit a new instrument panel** for testing.

INSTRUMENT PANEL

Fault finding - Configurations and programming

83A

To configure the instrument panel it is imperative to follow the steps described below:

- 1 - Test the multiplex network and make sure it complies. If the multiplex system is not correct (see **Multiplexing** in the Repair Manual).
- 2 - Disconnect and reconnect the battery.
- 3 - Connect the diagnostic tool.
- 4 - Carry out a "computer test".
- 5 - Select "Multiplex network" then OK.

IMPORTANT

As instructed, do not switch on the ignition, then confirm.

- 6 - Quit the Multiplex Network result.
- 7 - Select "Connection unit".
- 8 - Select "Command mode".
- 9 - Select "Configuration".
- 10 - Select **CF 719 "Instrument panel type"**.
- 11 - Follow the procedure.
- 12 - Switch on the ignition, as indicated, and OK the configurations.
- 13 - Switch the ignition off and on before selecting the command **CF 719 "Instrument panel type"** to check that the configurations have in fact been accepted.
- 14 - Check the absence of faults.

If the UCH is replaced it must also be configured.

INSTRUMENT PANEL

Fault finding - Customer complaints

83A

ENGINE SPEED

DISPLAY AT ZERO OR INCONSISTENT SIGNAL

ALP 1

COOLANT TEMPERATURE

NO SIGNAL OR INCONSISTENT SIGNAL

ALP 2

FUEL LEVEL

NO LEVEL SIGNAL OR INCONSISTENT SIGNAL

ALP 3

THE MINIMUM FUEL LEVEL WARNING REMAINS LIT (tank not in reserve)
OR DOES NOT LIGHT UP (tank in reserve)

ALP 4

SEVERITY LEVEL 2 INJECTION FAULT / COOLANT TEMPERATURE

THE WARNING LIGHT REMAINS LIT

ALP 5

SEVERITY LEVEL 1 INJECTION FAULT / DIESEL PREHEATING

THE WARNING LIGHT REMAINS LIT

ALP 6

VEHICLE SPEED

INDICATOR ON ZERO OR ERRATIC SIGNAL (Signal from ABS)

ALP 7

INDICATOR ON ZERO OR INCONSISTENT SIGNAL (Signal from gearbox)

ALP 8

AIRBAG FAULT

THE WARNING LIGHT REMAINS LIT

ALP 9

OIL PRESSURE WARNING

THE WARNING LIGHT REMAINS LIT

ALP 10

OIL LEVEL

DISPLAY ABSENT OR INCORRECT

ALP 11

INSTRUMENT PANEL

Fault finding - Customer complaints

83A**DIPPED HEADLIGHTS**

THE WARNING LIGHT OPERATES INCONSISTENTLY

ALP 12**MAIN BEAM HEADLIGHTS**

THE WARNING LIGHT OPERATES INCONSISTENTLY

ALP 13**REAR FOG LIGHTS**

THE WARNING LIGHT OPERATES INCONSISTENTLY

ALP 14**FRONT FOG LIGHTS**

THE WARNING LIGHT OPERATES INCONSISTENTLY

ALP 15**ABS**

THE WARNING LIGHT OPERATES INCONSISTENTLY

ALP 16**DIRECTION INDICATOR LIGHTS**

THE WARNING LIGHT OPERATES INCONSISTENTLY

ALP 17**SEAT BELT NOT FASTENED WARNING LIGHT**

THE WARNING LIGHT OPERATES INCONSISTENTLY

ALP 18**ENGINE IMMOBILISER**

WARNING LIGHT REMAINS LIT OR FLASHES WHEN DRIVING

ALP 19

WARNING LIGHT REMAINS NOT LIT WHEN NOT UNDER AFTER
IGNITION FEED

ALP 20**BATTERY CHARGE FAULT**

WARNING LIGHT REMAINS LIT (engine running)

ALP 21

INSTRUMENT PANEL

Fault finding - Customer complaints

83A

HANDBRAKE APPLIED AND BRAKING SYSTEM FAULT DETECTED

THE WARNING LIGHT OPERATES INCONSISTENTLY

ALP 22

HEATED REAR SCREEN

THE WARNING LIGHT DOES NOT LIGHT UP

ALP 23

AUDIBLE WARNING (buzzer)

OPERATES INCONSISTENTLY

ALP 24

'SERVICE' WARNING LIGHT

REMAINS LIT

ALP 25

INSTRUMENT PANEL

NO DISPLAY WHEN IGNITION IS SWITCHED ON

ALP 26

TRIP COMPUTER OR TRIP MILEAGE OR CLOCK

RESET WHENEVER THE IGNITION IS SWITCHED OFF

ALP 27

CRUISE CONTROL / SPEED LIMITER WARNING LIGHT

THE WARNING LIGHT OPERATES INCONSISTENTLY

ALP 28

EPS WARNING LIGHT

THE WARNING LIGHT REMAINS LIT

ALP 29

THE WARNING LIGHT REMAINS EXTINGUISHED

ALP 30

DOOR OPEN WARNING LIGHT

THE WARNING LIGHT DOES NOT LIGHT UP

ALP 31

INSTRUMENT PANEL
Fault finding - Customer complaints

83A

LPG WARNING LIGHT

THE WARNING LIGHT REMAINS LIT

ALP 32

AUTOMATIC TRANSMISSION WARNING LIGHT OR GEAR ENGAGED INDICATOR

GEAR ENGAGED INDICATOR INOPERATIVE AND/OR
AUTOMATIC TRANSMISSION FAULT WARNING LIGHT LIT

ALP 33

SEQUENTIAL GEARBOX WARNING LIGHT OR GEAR ENGAGED INDICATOR

GEAR ENGAGED INDICATOR INOPERATIVE

ALP 34

LPG ADDITIONS DO NOT REGISTER ON THE INSTRUMENT PANEL

ALP 35

INSTRUMENT PANEL

Fault finding - Fault Finding Chart

83A

ALP 1	Engine speed display at zero or inconsistent signal Message from: injection computer
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Run fault finding on the multiplex network using the diagnostic tool. If the multiplex network is not correct (see 88B, Multiplexing).
If the multiplex network is correct, establish dialogue with the injection computer. Check that the engine speed signal is present and consistent. If the engine speed signal is absent or inconsistent, carry out fault finding on the injection computer. Deal with any other faults.
If there is no injection computer fault, run an instrument panel self-test sequence. If the self-test sequence is not correct, contact the Techline.

INSTRUMENT PANEL

Fault finding - Fault Finding Chart

83A

ALP 2	Coolant temperature signal is absent or inconsistent Message from: injection computer
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Run fault finding on the multiplex network using the diagnostic tool.
If the multiplex network is not correct (see **88B, Multiplexing**).

If the multiplex network is correct, establish dialogue with the injection computer.
Check that the coolant temperature signal is present and consistent.
If the coolant temperature signal is absent or inconsistent, carry out fault finding on the injection computer. Deal with any other faults.

If there is no injection computer fault, run an instrument panel self-test sequence.
If the self-test sequence is not correct, contact the Techline.

INSTRUMENT PANEL

Fault finding - Fault Finding Chart

83A**ALP 3**

Fuel level signal is absent or inconsistent
Message from: injection computer + fuel tank sender

Run fault finding on the multiplex network using the diagnostic tool.
If the multiplex network is not correct (see **88B, Multiplexing**).

If the multiplex network is correct, establish dialogue with the injection computer.
Check that the fuel flow signal is present and consistent.
If the fuel flow signal is absent or inconsistent, run fault finding on the injection computer. Deal with any other faults.

If there is no injection computer fault, run an instrument panel self-test sequence.
If the self-test sequence is not correct, contact the Techline.

If the self-test sequence reveals no faults, move the wiring harness between the fuel tank sender and the instrument panel to note any change in the status of the fuel level signal. Look for any other damage to the harness, check the connection and condition of the connectors.
Repair if necessary.

If the fault is still present, check that the fuel tank is not damaged.
Replace the fuel tank if necessary.

If the fault is still present, check the gauge mounting.
Repair if necessary.

If the fault is still present, disconnect the fuel gauge connector and measure the resistance across **tracks B1 and A1** of the fuel sender.
Fuel tank full = **20 Ω** (50-l fuel tank)
Fuel tank empty = **320 Ω**
Replace the sender if faulty.

If the fault is still present, **check the insulation, continuity and the absence of interference resistance** on the following connections:

Tank sender **track A1** \longrightarrow **track 26** on the 30-track instrument panel connector
Tank sender **track B1** \longrightarrow **track 27** on the 30-track instrument panel connector

Repair if necessary.

INSTRUMENT PANEL
Fault finding - Fault Finding Chart

83A

ALP 4	The low fuel level warning light remains lit (tank not in reserve) or does not light up (tank in reserve)
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Run a diagnostic sequence on the instrument panel. If the diagnostic sequence is incorrect, contact the Techline.
If the self-test sequence is correct, check the installation of the tank sender. Repair if necessary.
If the fault is still present, disconnect the fuel tank sender connector and measure the resistance across tracks B1 and A1 of the fuel tank sender. Fuel tank full = 20 Ω (50-l fuel tank) Fuel tank empty = 320 Ω Replace the sender if faulty.
If the fault is still present, check the insulation, continuity and the absence of interference resistance on the following connections: Tank sender track A1 —————→ track 26 on the 30-track instrument panel connector Tank sender track B1 —————→ track 27 on the 30-track instrument panel connector Repair if necessary.

INSTRUMENT PANEL

Fault finding - Fault Finding Chart

83A

ALP 5	<p>The injection fault warning light severity level 2 / coolant temperature warning light remains lit</p> <p>Message from: injection computer</p>
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<p>Run fault finding on the multiplex network using the diagnostic tool. If the multiplex network is not correct (see 88B, Multiplexing).</p>
<p>If the multiplex network is correct, run complete fault finding on the injection computer. Deal with any other faults.</p>
<p>If there is no injection computer fault, run an instrument panel self-test sequence. If the self-test sequence is not correct, contact the Techline.</p>

INSTRUMENT PANEL

Fault finding - Fault Finding Chart

83A

ALP 6	<p>The injection fault warning light severity level 1 / diesel preheating light remains lit</p> <p>Message from: injection computer</p>
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<p>Run fault finding on the multiplex network using the diagnostic tool. If the multiplex network is not correct (see 88B, Multiplexing).</p>
<p>If the multiplex network is correct, run complete fault finding on the injection computer. Deal with any other faults.</p>
<p>If there is no injection computer fault, run an instrument panel self-test sequence. If the self-test sequence is not correct, contact the Techline.</p>

INSTRUMENT PANEL

Fault finding - Fault Finding Chart

83A

ALP 7

Vehicle speedometer at zero or inconsistent signal
Signal from ABS

Run a diagnostic sequence on the instrument panel.
If the diagnostic sequence is incorrect, contact the Techline.

If the self-test sequence is correct:
Check that the ABS computer is processing the speed.
Move the wiring harness between the ABS computer and the instrument panel until a change in vehicle speed signal status is noted.
Look for any other damage to the harness, check the connection and condition of the connectors.
Repair if necessary.

If the fault is still present, **check the insulation, continuity and the absence of interference resistance** on the following connections:

ABS computer (with electronic stability program) track 33	————→	Track 14 on the 15-track instrument panel connector.
ABS computer (without electronic stability program) track 23	————→	Track 14 on the 15-track instrument panel connector.

Repair if necessary.

Using the diagnostic tool during a road test, check that the UCH is receiving the vehicle speed signal correctly.
In this case, contact the Techline.
If the signal is not received by the UCH, carry out a full fault finding procedure on the ABS computer.
Deal with any other faults.

INSTRUMENT PANEL

Fault finding - Fault Finding Chart

83A

ALP 8	<p>Vehicle speedometer at zero or inconsistent signal</p> <p>Signal from gearbox</p>
<p>Run a diagnostic sequence on the instrument panel. If the diagnostic sequence is incorrect, contact the Techline.</p>	
<p>If the signal is inconsistent, read the UCH computer to check that the instrument panel speed calibration settings are correct.</p>	
<p>If the self-test sequence is correct, use the diagnostic tool during a road test to check that the UCH is receiving the vehicle speed signal correctly. In this case, contact the Techline.</p>	
<p>If the UCH is not receiving the vehicle speed signal, move the wiring harness between the speed sensor and the instrument panel to note any change in the status of the vehicle speed signal. Look for any other damage to the harness, check the connection and condition of the connectors. Repair if necessary. Check that the engine speed sensor is in good condition. Replace it if necessary.</p>	
<p>If the fault is still present: disconnect the speed sensor connector and check for + 12 V on track A of the sensor, and the presence of earth on track B2 of the sensor.</p>	
<p>If a + 12 V feed is not present, check the vehicle speed sensor fuse. Replace it if necessary. If the fault is still present, check the insulation, continuity and the absence of interference resistance on the following connection: Power feed fuse rack (see wiring diagram) —————→ track A of the speed sensor Repair if necessary.</p>	
<p>If the fault is still present, check the insulation, continuity and the absence of interference resistance on the following connection: Earth —————→ track B2 of the speed sensor Repair if necessary.</p>	
<p>If the fault is still present, check the insulation, continuity and the absence of interference resistance on the following connection: Speed sensor track B1 —————→ Track 14 on the 15-track instrument panel connector. Repair if necessary.</p>	
<p>If the fault is still present, replace the speed sensor.</p>	

INSTRUMENT PANEL

Fault finding - Fault Finding Chart

83A

ALP 9	Airbag fault warning light remains lit
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Carry out a complete fault finding procedure on the airbag computer and seat belt pretensioner.
Deal with any other faults.

If the fault is still present, check the multiplex system using the diagnostic tool.
If the multiplex network is not correct (see **88B, Multiplexing**).

Run a diagnostic sequence on the instrument panel.
If the self-test sequence is not correct, contact the Techline.

INSTRUMENT PANEL
Fault finding - Fault Finding Chart

83A

ALP 10	The oil pressure warning light remains lit
<p>Check the general level of engine wear, oil level, compression, oil circuit, etc. Check there is no major external oil leakage. Repair if necessary.</p>	
<p>If the engine is in good condition, check the earth insulation on track 1 of the oil pressure sensor, with the engine running. If there is an earth, replace the oil pressure sensor.</p>	
<p>Move the wiring harness between the oil pressure sensor and the instrument panel to note any change in the status of the oil pressure warning light. Look for any other damage to the harness, check the connection and condition of the connectors. Repair if necessary.</p>	
<p>If the fault is still present, check the continuity on the following connection: Oil pressure sensor track 1 —————▶ track 11 on the 15-track instrument panel connector. Repair if necessary.</p>	
<p>If the fault is still present, contact the Techline.</p>	

INSTRUMENT PANEL
Fault finding - Fault Finding Chart

83A

ALP 11	Oil level indication not present or incorrect
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<p>Remove the oil level sensor and check its resistance, which should be 3 Ω to 6 Ω. Replace the sensor if necessary.</p>
<p>Disconnect the instrument panel connectors, then check the insulation, continuity and the absence of interference resistance of the following connections:</p> <p>Oil level sensor track 1 —————→ track 25 on the 30-track instrument panel connector Oil level sensor track 2 —————→ track 24 on the 30-track instrument panel connector</p> <p>Repair if necessary.</p>
<p>If the fault is still present, contact the Techline.</p>

INSTRUMENT PANEL
Fault finding - Fault Finding Chart

83A

ALP 12

The dipped headlight indicator light operates inconsistently

Follow this fault finding procedure only if:

- the dipped headlights remain on and the indicator remains off,
- the dipped headlights remain off and the indicator remains on.

Lighting stalk in the dipped headlights on position.

Check for **+ 12 V** on **track 4** of the **30-track** instrument panel connector.


Manipulate the wiring harness between the switch and the instrument panel to bring about a change of status of the indicator light.

Look for any other damage to the harness, check the connection and condition of the connectors.

Repair if necessary.

If there is no **+ 12 V** on **track 4** of the instrument panel, switch stalk in rest position.

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

Passenger compartment fuse box (see wiring diagram)  **track 4** of the instrument panel 30-track connector

Repair if necessary.

If the fault is still present, contact the Techline.

INSTRUMENT PANEL

Fault finding - Fault Finding Chart

83A

ALP 13

The main beam indicator light operates inconsistently

Follow this fault finding procedure only if:

- the main beam headlights remain on and the indicator remains off,
- the main beam headlights remain off and the indicator remains on.

Lighting stalk in the main beam headlights on position.

Check for **+ 12 V** on **track 3** of the **30-track** instrument panel connector.

Manipulate the wiring harness between the switch and the instrument panel to bring about a change of status of the indicator light.

Look for any other damage to the harness, check the connection and condition of the connectors.

Repair if necessary.

If there is no **+ 12 V** on **track 3** of the instrument panel, switch stalk in rest position.

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

Passenger compartment fuse box (see wiring diagram) —————▶ **track 3** of the instrument panel
30-track connector

Repair if necessary.

If the fault is still present, contact the Techline.

INSTRUMENT PANEL
Fault finding - Fault Finding Chart

83A

ALP 14

The rear fog light warning light operates erratically

Follow this fault finding procedure only if:

- the rear fog lights are on and the indicator light remains off,
- the dipped headlights remain off and the indicator remains on.

Lighting stalk in rear fog lights on position.
Check for **+ 12 V** on **track 5** of the red instrument panel connector.
Manipulate the wiring harness between the switch and the instrument panel to bring about a change of state of the indicator light.
Look for any other damage to the harness, check the connection and condition of the connectors.
Repair if necessary.

If there is no **+ 12 V** on **track 5** of the red instrument panel connector, switch stalk in the rest position.
Check the **insulation, continuity and the absence of interference resistance** on the following connection:
Stalk **track A3** —————▶ **track 5** of the 30-track instrument panel connector

Repair if necessary.

If the fault is still present, contact the Techline.

INSTRUMENT PANEL

Fault finding - Fault Finding Chart

83A

ALP 15

The front fog light warning light operates erratically

Follow this fault finding procedure only if:

- the front fog lights are on and the indicator light remains off,
- the front fog lights are off and the indicator light remains on.

Lighting stalk in the dipped headlights on position.

Check for **+ 12 V** on **track 6** of the red instrument panel connector.

Manipulate the wiring harness between the switch and the instrument panel to bring about a change of status of the indicator light.

Look for any other damage to the harness, check the connection and condition of the connectors.

Repair if necessary.

If there is no **+ 12 V** on **track 6** of the red instrument panel connector, switch stalk in the rest position.

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

Stalk **track A3** —————▶ **track 6** on the 30-track instrument panel connector

Repair if necessary.

If the fault is still present, contact the Techline.

INSTRUMENT PANEL
Fault finding - Fault Finding Chart

83A

ALP 16	The ABS warning light operates inconsistently
Carry out a full fault finding check of the ABS computer. Deal with any other faults.	
If the ABS warning light is not lit, disconnect the ABS computer and check whether the light on the instrument panel lights up. If the light does not come on, contact the Techline.	
Vehicle stationary (ABS warning light normally extinguished), check the + 12 V insulation: – on track 7 of the ABS computer (with electronic stability program), – on track 22 of the ABS computer (without electronic stability program). If a + 12 V feed is present, contact the Techline.	
Disconnect the black connector on the ABS computer and check the insulation, continuity and the absence of interference resistance on the following connections: ABS computer (with electronic stability program) track 7 —————→ track 7 of the 30-track instrument panel connector ABS computer (without electronic stability program) track 22 —————→ track 7 of the 30-track instrument panel connector Repair if necessary.	
If the fault is still present, contact the Techline.	

INSTRUMENT PANEL
Fault finding - Fault Finding Chart

83A

ALP 17

The direction indicator signal light operates erratically

If the direction indicators are not operating normally, carry out fault finding on the UCH.

Move the wiring between wire splice **E64CL** and the instrument panel (for a right-hand side direction indicator warning light fault) or between wire splice **E64DK** and the instrument panel (for a left-hand side direction indicator warning light fault) to note any change in the status of the warning light.
Look for any other damage to the harness, check the connection and condition of the connectors.
Repair if necessary.

Disconnect the instrument panel and **UCH** connectors and check **the insulation, continuity and the absence of interference resistance** on the following connections:

UCH 9-track white module black connector track 3	————→	track 2 on the 30-track instrument panel connector
UCH 9-track white module black connector track 2	————→	track 1 on the 30-track instrument panel connector

Repair if necessary.

If the fault is still present, contact the Techline.

INSTRUMENT PANEL

Fault finding - Fault Finding Chart

83A**ALP 18****The fasten seat belt reminder warning light operates inconsistently**

Disconnect the seat belt switch connector. Check that the switch is open when the seat belt is fastened and that the switch is closed when the seat belt is not fastened.
Replace it if necessary.

Run a diagnostic sequence on the instrument panel.
If the diagnostic sequence is incorrect, contact the Techline.

If the self-test sequence reveals no faults, move the wiring harness between the seat belt switch and the instrument panel to note any change in the status of the warning light.
Look for any other damage to the harness, check the connection and condition of the connectors.
Repair if necessary.

Check for **earth** on **track 2** of the seat belt switch.
If there is no **earth** on **track 2**, check **the insulation, continuity and the absence of interference resistance** on the following connection:

Seat belt switch **track 2** —————> **earth**

Repair if necessary.

If the fault is still present, check **for insulation, continuity and the absence of interference resistance** on the following connection:

Seat belt switch **track 1** —————> **track 12** on the 15-track instrument panel connector.

Repair if necessary.

If the fault is still present, contact the Techline.

INSTRUMENT PANEL

Fault finding - Fault Finding Chart

83A

ALP 19	The immobiliser warning light remains lit or flashes when the vehicle is driven
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Run complete fault finding on the UCH. Check that the "immobiliser warning light" status changes to INACTIVE when the engine is running. If this is not the case (see UCH fault finding note).
If the "immobiliser warning light" status switches to INACTIVE with the engine running, disconnect the black connector from the UCH. If the warning light is no longer lit, the UCH may be faulty. Contact the Techline.
If the warning light is still lit, check the insulation in relation with the earth of the following connection: UCH brown module black connector track 5 —————▶ track 20 on the 30-track instrument panel connector Repair if necessary.
If the fault is still present, contact the Techline.

INSTRUMENT PANEL

Fault finding - Fault Finding Chart

83A

ALP 20	The immobiliser warning light remains lit when not under an after ignition feed
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Carry out a full fault finding check on the UCH. Check that the "immobiliser warning light" status is ACTIVE when the engine is switched off. If this is not the case consult the UCH fault finding note.
If the warning light is still lit, check the + 12 V insulation and the continuity on the following connection: UCH brown module black connector track 5 —————→ track 20 of the 30-track instrument panel connector Repair if necessary.
If the fault is still present, contact the Techline.

INSTRUMENT PANEL
Fault finding - Fault Finding Chart

83A

ALP 21	The battery charge fault warning light remains lit (engine running)
Check the charge circuit. Repair if necessary.	
Manipulate the wiring harness between the alternator and the instrument panel to bring about a change of status of the indicator light. Look for any other damage to the harness, check the connection and condition of the connectors. Repair if necessary.	
If the fault is still present, disconnect the instrument panel connector and check the earth insulation, continuity and absence of interference resistance on the following connection: Alternator track 1 —————▶ track 29 of the 30-track instrument panel connector Repair if necessary.	
If the fault is still present, contact the Techline.	

INSTRUMENT PANEL

Fault finding - Fault Finding Chart

83A

ALP 22	The handbrake applied indicator light and fault detected on braking circuit warning light operates inconsistently
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<p>Check the brake fluid level. Check that there are no leaks in the brake circuit: Top up if necessary.</p>
<p>Check that the handbrake is released, then run an instrument panel self-diagnostic sequence. If the diagnostic sequence is incorrect, contact the Techline.</p>
<p>If the diagnostic sequence is correct, disconnect the handbrake switch connector. Check that the circuit is open when the switch is in its neutral position and that the circuit is closed when the switch is pressed. Replace the switch if necessary.</p>
<p>Move the wiring harness between the handbrake switch and the instrument panel until a change in warning light status is noted. Look for any other damage to the harness, check the connection and condition of the connectors. Repair if necessary.</p>
<p>Check the insulation, continuity and the absence of interference resistance on the following connection: <div style="text-align: center;"> Handbrake switch track 23 of the 30-track instrument panel connector </div> <p>Repair if necessary.</p> </p>
<p>Check the continuity and insulation of the following connection: <div style="text-align: center;"> Track 12 of the 26-track ABS connector track 27 of the 30-track instrument panel connector </div> <p>Repair if necessary.</p> </p>
<p>Disconnect the brake fluid level switch. Check that the circuit is open when the switch is in its neutral position and that the circuit is closed when the switch is pressed. Replace the switch if necessary.</p>
<p>Move the wiring harness between the brake fluid level switch and the instrument panel until a change in status is noted. Look for any other damage to the harness, check the connection and condition of the connectors. Repair if necessary.</p>
<p>Check for earth on track 2 of the brake fluid level switch. If there is no earth on track 2, check the insulation, continuity and the absence of interference resistance on the following connection: <div style="text-align: center;"> Brake fluid level switch track 2 earth </div> <p>Repair if necessary.</p> </p>
<p>If the fault is still present, check for insulation, continuity and the absence of interference resistance on the following connection: <div style="text-align: center;"> Brake fluid level switch track 1 track 22 of the 30-track instrument panel connector </div> <p>Repair if necessary.</p> </p>
<p>If the fault is still present, contact the Techline.</p>

INSTRUMENT PANEL

Fault finding - Fault Finding Chart

83A

ALP 23	The heated rear screen warning light does not light up
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Use the diagnostic tool for running multiplex network diagnostics.
If the multiplex network is not correct (see **88B, Multiplexing**).

If the multiplex system is correct, carry out a complete fault finding procedure on the UCH.
Deal with any other faults.

If there is no UCH fault, run a self-diagnostic sequence on the instrument panel.
If the diagnostic sequence is incorrect, contact the Techline.

INSTRUMENT PANEL
Fault finding - Fault Finding Chart

83A

ALP 24	The audible warning (buzzer) sounds inconsistently
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Run fault finding on the multiplex network using the diagnostic tool. If the multiplex network is not correct (see 88B, Multiplexing).
If the multiplex system is correct, carry out a complete fault finding procedure on the UCH. Deal with any other faults.
If there is no UCH fault, run an instrument panel self-test sequence. If the fault is still present, contact the Techline.

INSTRUMENT PANEL

Fault finding - Fault Finding Chart

83A

ALP 25	The SERVICE warning light remains lit
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Activate an instrument panel self-diagnostic sequence and ensure that there is no oil level sensor fault by display of the " h " message on the instrument panel. Apply the fault finding procedure in FAULT FINDING CHART 11.
First carry out a fault finding procedure on the multiplex system using the diagnostic tool. If the multiplex system is not correct (see Multiplexing).
If the multiplex network is correct, carry out a complete fault finding procedure on the UCH. Check for the presence of any "wiper" faults. Deal with any other faults.
Run fault finding on the ABS computer. Deal with any other faults. Verify correct operation of the ABS fault warning light when + after ignition feed is switched on.
If the fault is still present, contact the Techline.

INSTRUMENT PANEL

Fault finding - Fault Finding Chart

83A

ALP 26

There is no instrument panel display when the ignition is switched on

Check the condition of the passenger compartment fuses.
Check for **+ after ignition feed** on **track 2** of the instrument panel and for earth on **track 4** of the **15-track** instrument panel connector.
Repair if necessary.

If the fault is still present, contact the Techline.

INSTRUMENT PANEL

Fault finding - Fault Finding Chart

83A

ALP 27

The trip computer or the trip meter or clock reset to zero each time the ignition is switched off

Check the condition of the passenger compartment fuses.

Check for **+ 12 V** on **track 1** of the instrument panel and for **earth** on **track 4** of the **15-track** instrument panel connector.

Repair if necessary.

If the fault is still present, contact the Techline.

INSTRUMENT PANEL

Fault finding - Fault Finding Chart

83A

ALP 28	Cruise control/speed limiter warning light operates erratically
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First carry out a fault finding procedure on the multiplex network using the diagnostic tool.
If the multiplex network is not correct (see **88B, Multiplexing**).

If the multiplex network is correct, run complete fault finding on the injection computer.
Deal with any other faults.

If there is no injection computer fault, run an instrument panel self-test sequence.
If the diagnostic sequence is incorrect, contact the Techline.

INSTRUMENT PANEL
Fault finding - Fault Finding Chart

83A

ALP 29	Power assisted steering (PAS) warning light stays on
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Run fault finding on the EPS computer using the diagnostic tool. Deal with any faults.
If there is no fault in the EPS computer, disconnect the EPS computer connector. If the warning light goes out, the EPS computer is faulty. Contact the Techline.
If the warning light remains lit, disconnect the instrument panel connectors and check the earth insulation of the EPS fault warning light line: 30-track instrument panel connector track 8 —————▶ track 11 EPS computer Repair if necessary.
If the fault is still present, contact the Techline.

INSTRUMENT PANEL
Fault finding - Fault Finding Chart

83A

ALP 30	Power assisted steering (PAS) warning light stays off
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Run fault finding on the EPS computer using the diagnostic tool. Deal with any faults.
If there is no fault in the EPS computer, disconnect the EPS computer connector and the instrument panel connector. Check the continuity and + APC insulation on the EPS fault warning light line: 30-track instrument panel connector track 8 —————▶ track 11 EPS computer Repair if necessary.
Reconnect the instrument panel connector, then connect track 11 of the EPS computer to earth. If the warning light lights up, the EPS computer is faulty. Contact the Techline. If the warning light does not light up, the instrument panel is faulty. Contact the Techline.

INSTRUMENT PANEL

Fault finding - Fault Finding Chart

83A

ALP 31	Door open warning light does not light up
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Run fault finding on the multiplex network using the diagnostic tool. If the multiplex network is not correct (see 88B, Multiplexing).
If the multiplex system is correct, carry out fault finding on the UCH. Deal with any other faults.
If there is no UCH fault, run an instrument panel self-test sequence. If the diagnostic sequence is incorrect, contact the Techline.

INSTRUMENT PANEL

Fault finding - Fault Finding Chart

83A

ALP 32	LPG indicator light remains lit
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Run fault finding on the multiplex network using the diagnostic tool. If the multiplex network is not correct (see 88B, Multiplexing).
If the multiplex system is correct, run fault finding on the GAS injection computer. Deal with any other faults.
If there is no fault in the GAS injection computer, check the + 12 V insulation on track 26 of the 30-track of the instrument panel connector. Repair if necessary.
If the fault is still present, contact the Techline.

INSTRUMENT PANEL
Fault finding - Fault Finding Chart

83A

ALP 33	Gear engaged indicator inoperative and / or automatic transmission fault warning light lit
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Run fault finding on the multiplex network using the diagnostic tool. If the multiplex network is not correct (see 88B, Multiplexing).
If the multiplex system is correct, carry out fault finding on the automatic transmission computer. Deal with any other faults.
If the fault is still present, contact the Techline.

INSTRUMENT PANEL

Fault finding - Fault Finding Chart

83A

ALP 34	Gear engaged indicator inoperative and / or sequential gearbox fault warning light lit
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First carry out a fault finding procedure on the multiplex system using the diagnostic tool. If the multiplex network is not correct (see 88B, Multiplexing).
If the multiplex system is correct, run full fault finding on the sequential gearbox computer. Deal with any other faults.
If the fault is still present, contact the Techline.

INSTRUMENT PANEL
Fault finding - Fault Finding Chart

83A

ALP 35	LPG additions do not register on the instrument panel
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Explain to the customer that the instrument panel has difficulty detecting additions of less than 14 l . Advise him to make additions of more than 15 l .
If the customer complaint is still present, make it disappear by exiting from the self-test by pressing the odometer Reset button (forced reset).