

KANGOO CLIO MEGANE

Technical Note 3202A

XC0X - XB0X - XA0X

New generation instrument panel

For parts not dealt with in this Technical Note, refer to MR 312, 325 and 337.

77 11 202 649

NOVEMBER 2010

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 its vehicles are constructed".

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INSTRUMENT PANEL

New generation instrument panel

83A

FAULT FINDING - INTRODUCTION

To launch the instrument panel **FAULT FINDING PROCEDURE**, press and hold the odometer reset button for at least 5 seconds when the ignition is switched on or press the trip computer scroll button at the end of the wiper stalk and switch on the ignition.

THIS FAULT FINDING PROCEDURE DOES NOT CONCERN INSTRUMENT PANELS WITHOUT A REV COUNTER.

WARNING

When carrying out checks using a multimeter, avoid using a contact tip on the connectors the size of which could damage the clips and result in poor contact.

Instrument panel without rev counter

KANGOO - CLIO II



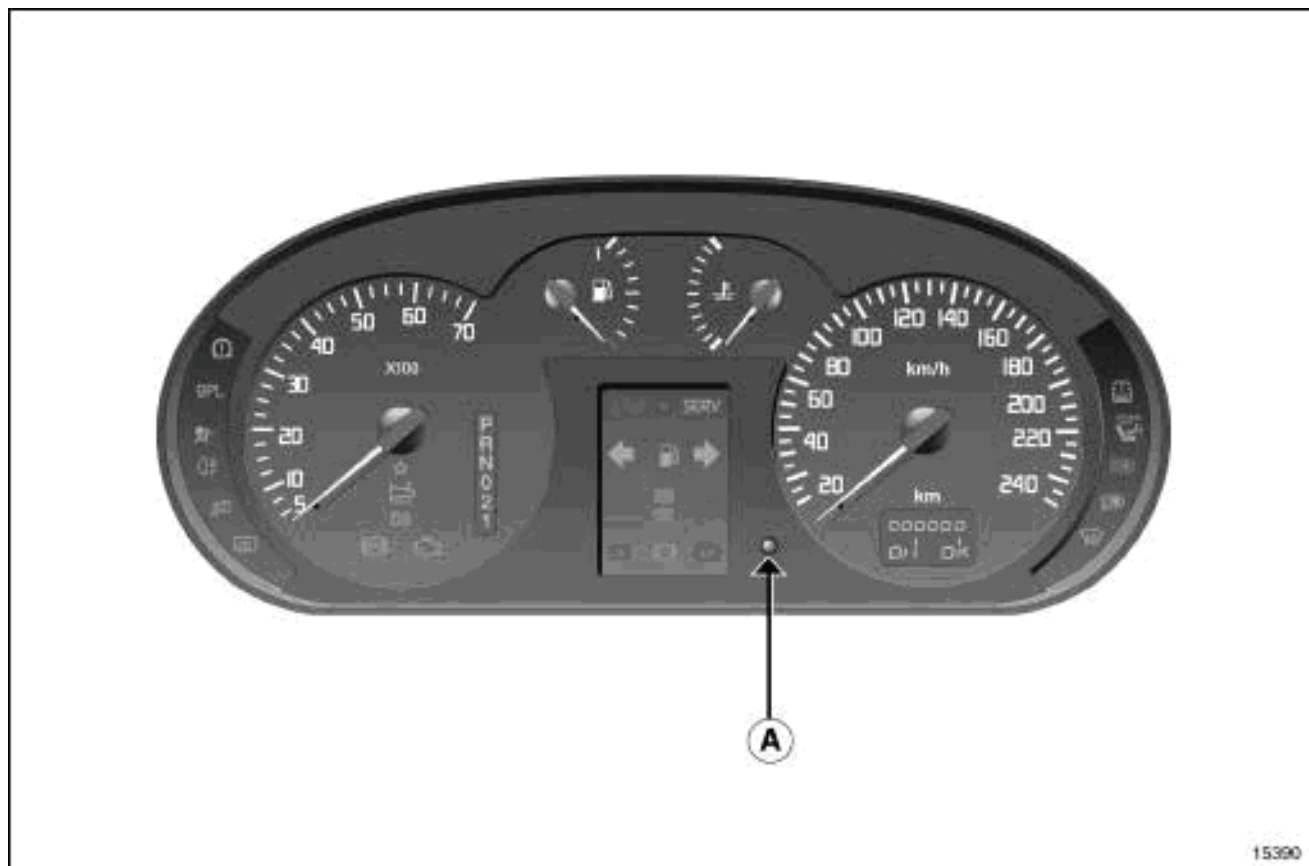
INSTRUMENT PANEL

New generation instrument panel

83A

Instrument panel with test mode

KANGOO - CLIO II - MEGANE

**A** odometer reset button

FAULT FINDING - CUSTOMER COMPLAINTS

NOTES

Consult the "Fault finding - Introduction" section before beginning

REV COUNTER FAULT

Rev counter does not operate

ALP 1

SPEEDOMETER FAULTThe speedometer does not operate and incorrect mileage displayed
(speed signal from the speed sensor)

ALP 2

The speedometer does not operate and incorrect mileage displayed
(speed signal from the ABS computer)

ALP 3

FUEL LEVEL GAUGE FAULT

No fuel level information on needle gauge (tank not empty)

ALP 4

The needle of the fuel level gauge remains jammed in the maximum
position... (ignition on), tank not full

ALP 5

FAULT FINDING - CUSTOMER COMPLAINTS

NOTES

Consult the "Fault finding - Introduction" section before beginning

FUEL LEVEL GAUGE FAULT

Fault without warning by warning light (Additional tank)

ALP 13

The warning light remains lit (Additional tank)

ALP 14

OIL LEVEL RECEIVER FAULT

The display switches directly to the mileometer without displaying the oil level bargraph

ALP 6

No oil level or odometer display

ALP 7

ODOMETER/TRIP COMPUTER PAGE DISPLAY FAULT

Partial loss of segments or half-tone segments on the odometer/trip computer pages display

ALP 8

FAULT FINDING - CUSTOMER COMPLAINTS

NOTES

Consult the "Fault finding - Introduction" section before beginning

COOLANT TEMPERATURE RECEIVER FAULT

Coolant temperature needle jammed at minimum or maximum

ALP 9

For vehicles equipped with an automatic transmission with or without a trip computer

AUTOMATIC TRANSMISSION OPTION DISPLAY FAULT

Engaged gear not displayed, fault warning light continuously lit

ALP 10

Engaged gear not displayed, fault warning light off

ALP 11

Inconsistency between the selector choice and the information displayed on the instrument panel

ALP 12

FAULT FINDING - FAULT FINDING CHARTS

ALP1

REV COUNTER DOES NOT OPERATE

NOTES

Move on to the fault finding procedure: press and hold the odometer reset button for at least **5 seconds** when the ignition is switched on, or press the trip computer scroll button and switch on the ignition.

Check the movement of the needle from 1000 in 1000 rpm increments.

OK

not OK

Check the continuity and the insulation of the rev counter signal wire between the injection computer and the instrument panel.

Replace the instrument panel.

not OK

Repair.

OK

Check the condition of the instrument panel 15-track connector and its pins.
Is the connector in good condition?

no

yes

Carry out fault finding on the injection computer in order to check the rev counter signal.
Is the signal correct?

no

Replace the computer.

yes

Replace the instrument panel.

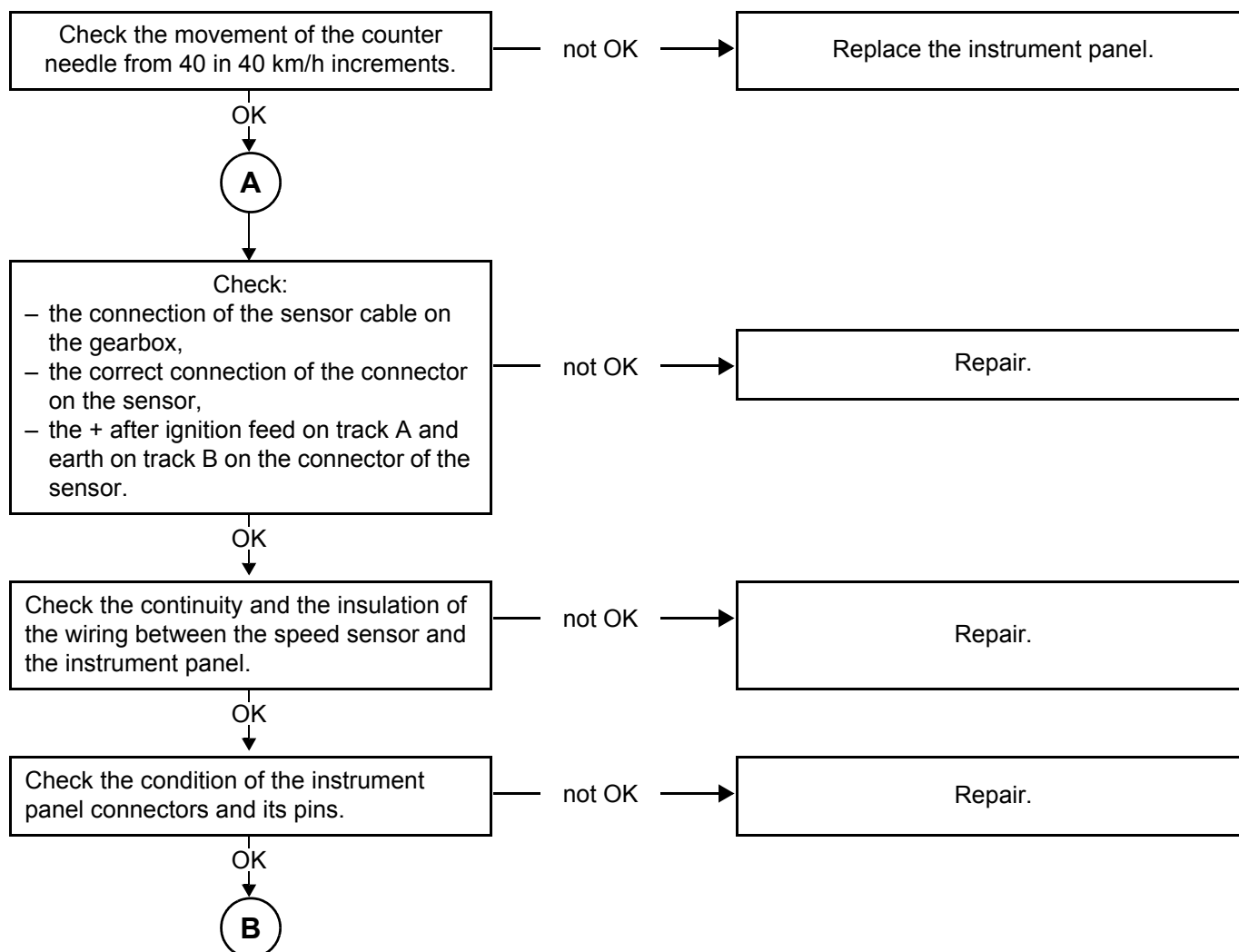
AFTER REPAIR

Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

FAULT FINDING - FAULT FINDING CHARTS

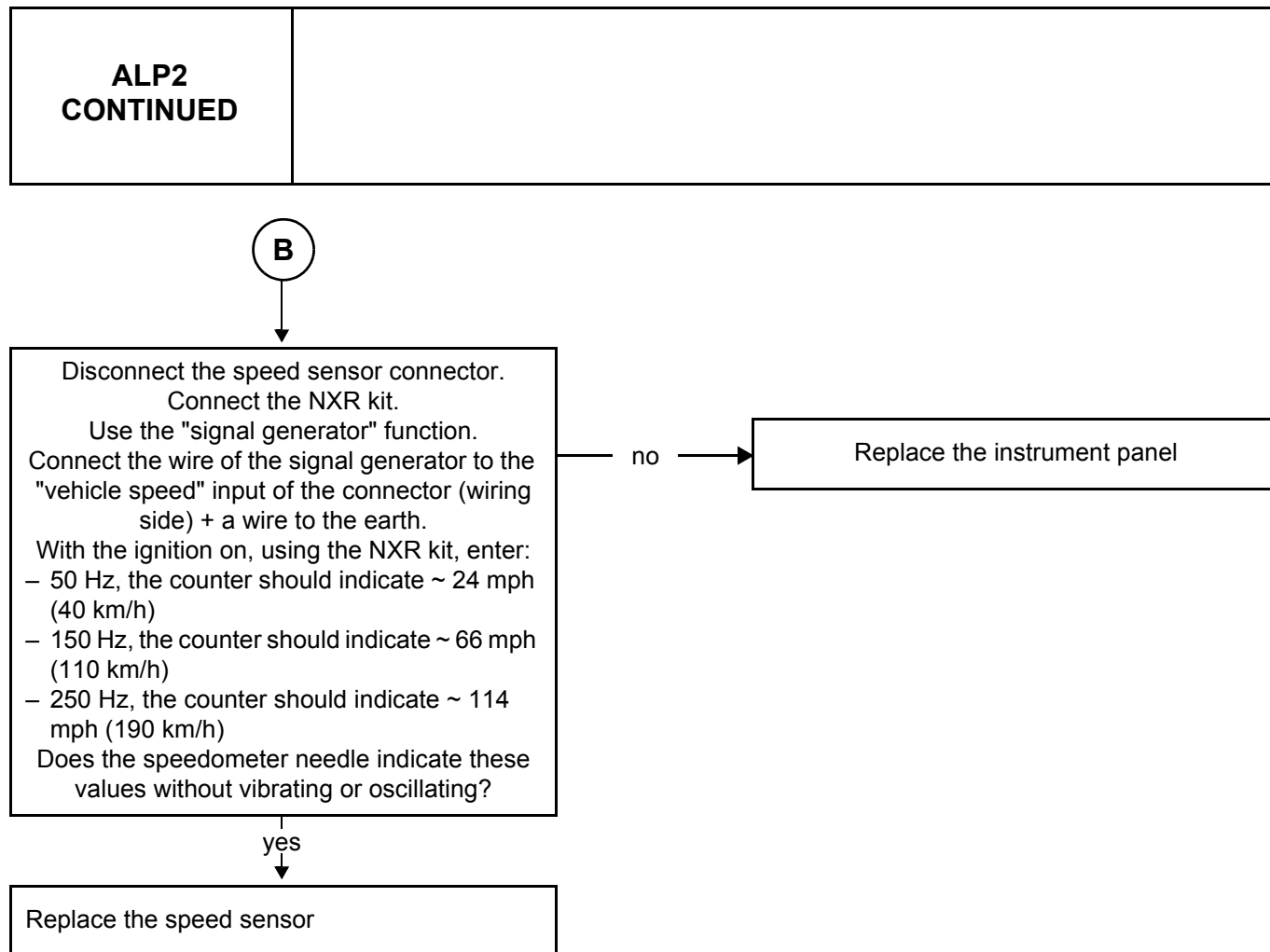
ALP2	SPEEDOMETER DOES NOT OPERATE AND INCORRECT MILEAGE DISPLAYED (Speed signal from the speed sensor)
-------------	--

NOTES	If the instrument panel does not have a rev counter, go directly to A , otherwise move on to the fault finding procedure (see the Fault finding - Introduction section for information on how to perform the procedure)
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AFTER REPAIR	Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.
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FAULT FINDING - FAULT FINDING CHARTS



NOTE: clear any faults in the injection computer generated by the previous operations.

AFTER REPAIR

Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

FAULT FINDING - FAULT FINDING CHARTS

ALP 3

**SPEEDOMETER DOES NOT OPERATE AND INCORRECT
MILEAGE DISPLAYED**
 (Speed signal from the ABS computer)

NOTES

If the instrument panel does not have a rev counter, go directly to **A**, otherwise move on to the fault finding procedure (see the Fault finding - Introduction section for information on how to perform the procedure)

Check the movement of the counter needle from 40 in 40 km/h increments.

OK

A

not OK

Replace the instrument panel

Check the connection of all of the ABS
computer connectors.
Are the connections correct?

not OK

Repair.

OK

Check the continuity and the insulation of
the speed signal wire between the
computer and the instrument panel.
Is the wiring harness sound?

no

Repair.

yes

Check the condition of the instrument
panel connectors and its pins.

not OK

Repair.

OK

Carry out fault finding on the ABS
computer. Replace it if it is faulty.

NOTE: clear any faults in the injection computer generated by the previous operations.

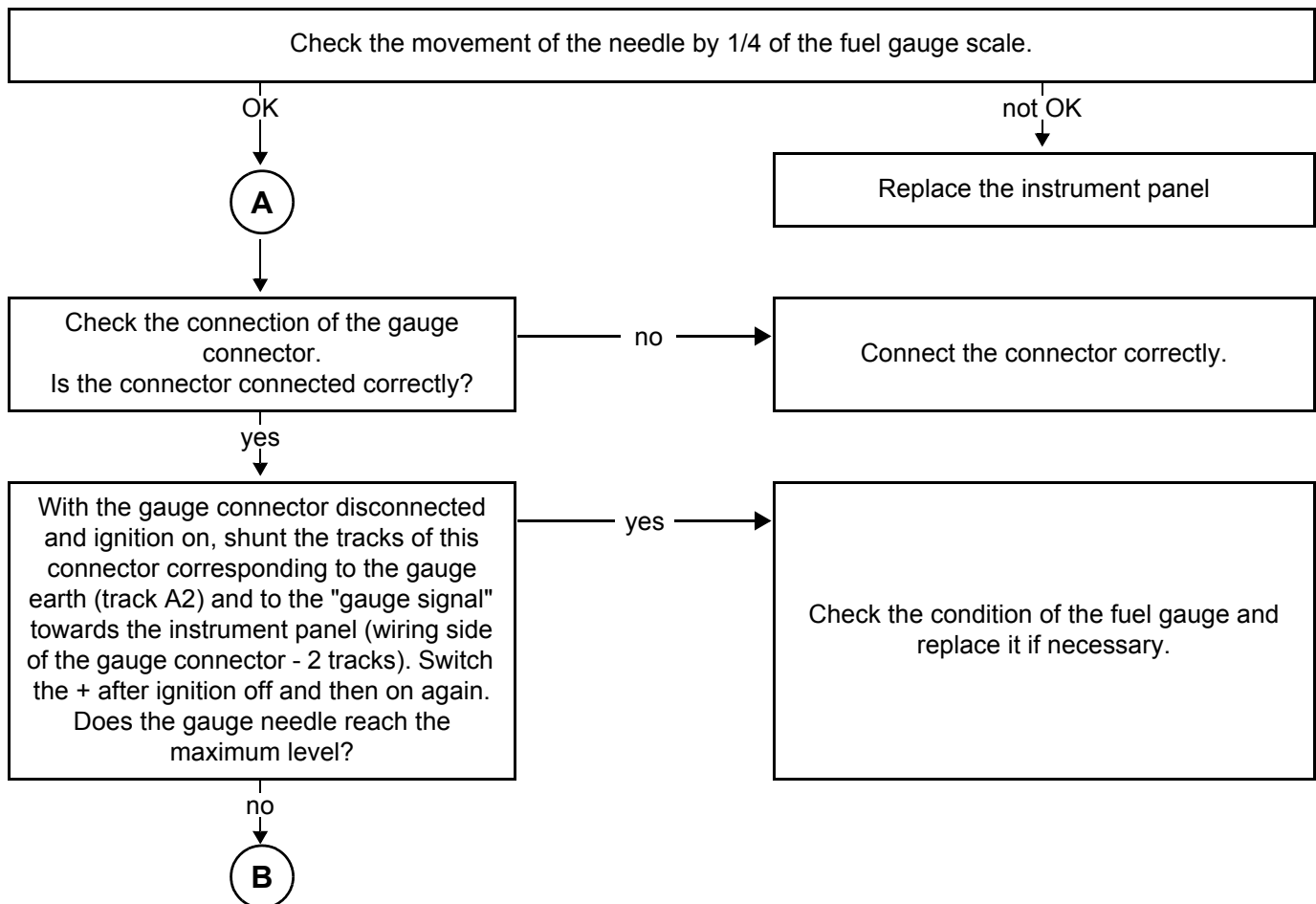
AFTER REPAIR

Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

FAULT FINDING - FAULT FINDING CHARTS

ALP4	NO FUEL LEVEL SIGNAL ON NEEDLE GAUGE (tank not empty)
-------------	--

NOTES	If the instrument panel does not have a rev counter, go directly to A , otherwise move on to the fault finding procedure (see the Fault finding - Introduction section for information on how to perform the procedure)
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AFTER REPAIR	Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.
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FAULT FINDING - FAULT FINDING CHARTS

ALP4
CONTINUED

B

Check the continuity of the electrical wiring corresponding to:

- the gauge earth,
- the "gauge signal" towards the instrument panel.

Is the wiring sound?

no

Repair the faulty electrical wiring.

yes

Check the condition of the connector on the instrument panel and its pins. Is the connector in good condition?

no

Repair.

yes

Replace the instrument panel.

AFTER REPAIR

Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

FAULT FINDING - FAULT FINDING CHARTS

ALP 5

THE NEEDLE OF THE FUEL LEVEL GAUGE REMAINS JAMMED IN THE MAXIMUM POSITION... (IGNITION ON), TANK NOT FULL

NOTES

If the instrument panel does not have a rev counter, go directly to **A**, otherwise move on to the fault finding procedure (see the Fault finding - Introduction section for information on how to perform the procedure)

Check the movement of the needle by 1/4 of the fuel gauge scale.

OK

A

not OK

Replace the instrument panel

Check the connection of the gauge connector and the condition of its pins. Is the connector connected correctly?

no

Connect the connector correctly.

yes

With the ignition on, disconnect the fuel gauge connector. Does the needle shift to the minimum position after the + after ignition feed is switched off and back on again?

yes

Check the condition of the fuel gauge and replace it if necessary.

no

B

AFTER REPAIR

Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

FAULT FINDING - FAULT FINDING CHARTS

ALP 5
CONTINUED

B

Check that there is no short circuit, with the instrument panel disconnected, between the **gauge earth** and the "**gauge signal**" towards the instrument panel, then between the "**gauge signal**" and the vehicle earth.
Is the wiring sound?

no

Repair the faulty electrical wiring.

yes

Check the condition of the connector on the instrument panel and its pins.
Is the connector in good condition?

no

Repair.

yes

Replace the instrument panel.

AFTER REPAIR

Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

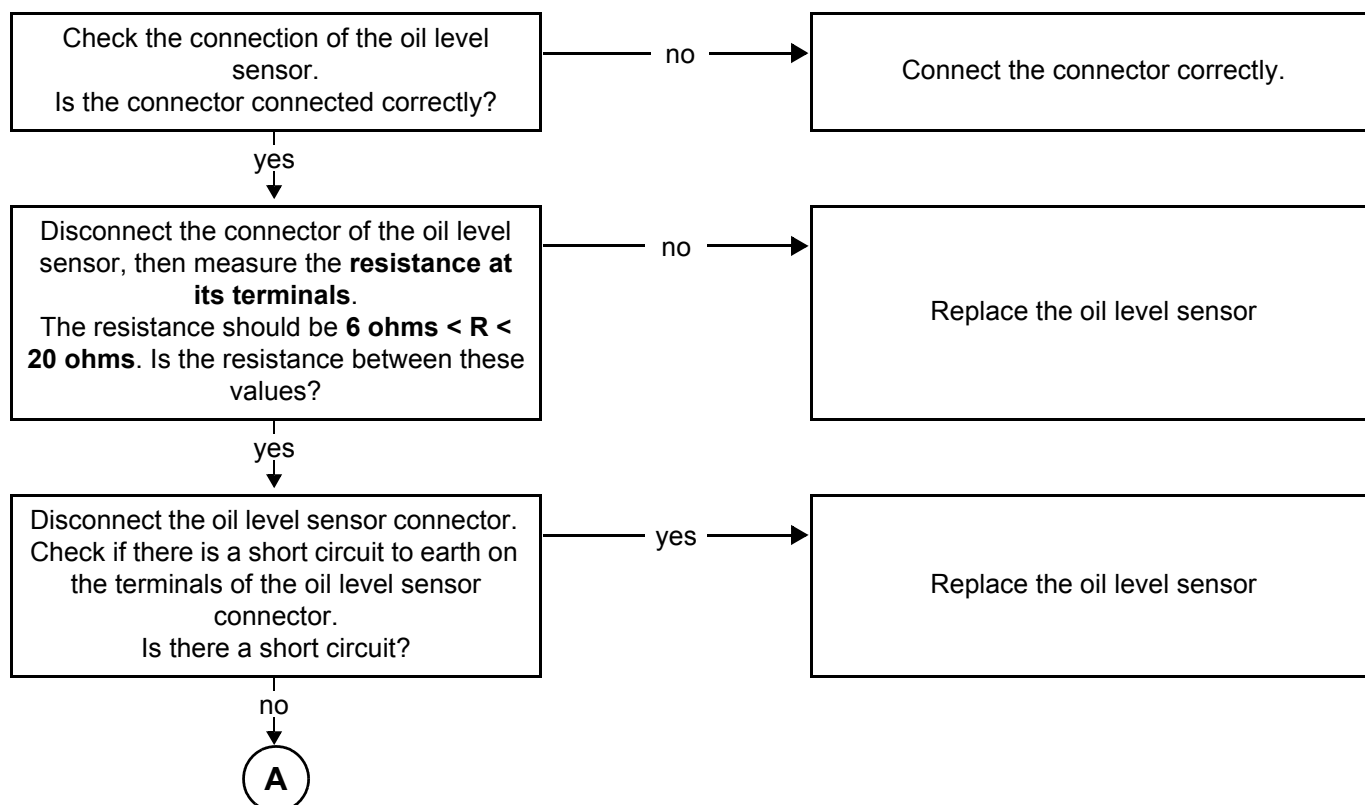
FAULT FINDING - FAULT FINDING CHARTS

ALP6

**THE DISPLAY SWITCHES DIRECTLY TO THE MILEOMETER
WITHOUT DISPLAYING THE OIL LEVEL BARGRAPH**

NOTES

Before any operation, check the battery voltage when the vehicle is started. If it is less than or equal to 7 V, restore the battery voltage.
Take care not to damage the connectors during the checks.

**AFTER REPAIR**

Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

FAULT FINDING - FAULT FINDING CHARTS

ALP6
CONTINUED

A

With the instrument panel disconnected, check the continuity and that there is no short circuit between the electrical wiring of the oil level sensor connector and the instrument panel.
Is the wiring sound?

no

Repair the faulty electrical wiring.

yes

Replace the instrument panel.

AFTER REPAIR

Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

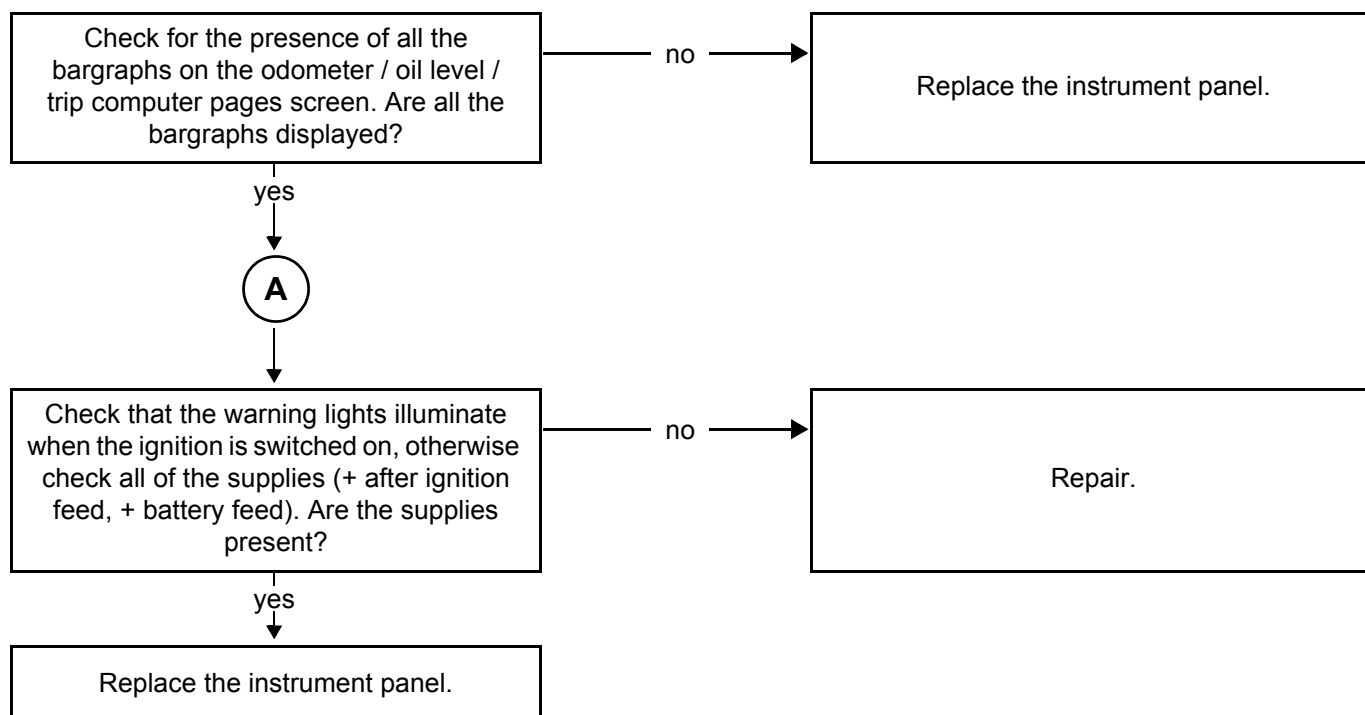
FAULT FINDING - FAULT FINDING CHARTS

ALP7

NO OIL LEVEL OR ODOMETER DISPLAY

NOTES

If the instrument panel does not have a rev counter, go directly to **A**, otherwise move on to the fault finding procedure (see the Fault finding - Introduction section for information on how to perform the procedure)



AFTER REPAIR

Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

FAULT FINDING - FAULT FINDING CHARTS

ALP8	PARTIAL LOSS OF SEGMENTS OR HALF-TONE SEGMENTS ON THE ODOMETER/TRIP COMPUTER PAGES DISPLAY
NOTES	None

Replace the instrument panel.

AFTER REPAIR	Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.
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FAULT FINDING - FAULT FINDING CHARTS

ALP 9

COOLANT TEMPERATURE NEEDLE JAMMED AT THE MINIMUM OR MAXIMUM

NOTES

If the instrument panel does not have a rev counter, go directly to **A**, otherwise move on to the fault finding procedure (see the Fault finding - Introduction section for information on how to perform the procedure)

Check the movement of the needle by 1/4 of the coolant temperature scale.

OK

not OK

A

Replace the instrument panel

Check the connection of the coolant temperature sensor connector.
Is the connector connected?

no

Connect the connector correctly.

yes

With the ignition on, connect the "temperature signal" output of the sensor to the earth and check that the needle indicates the maximum position.
Leave the ignition on and disconnect the coolant temperature sensor and check that the needle indicates the minimum position.
Does the needle indicate the maximum position and the minimum position during these tests?

no

B

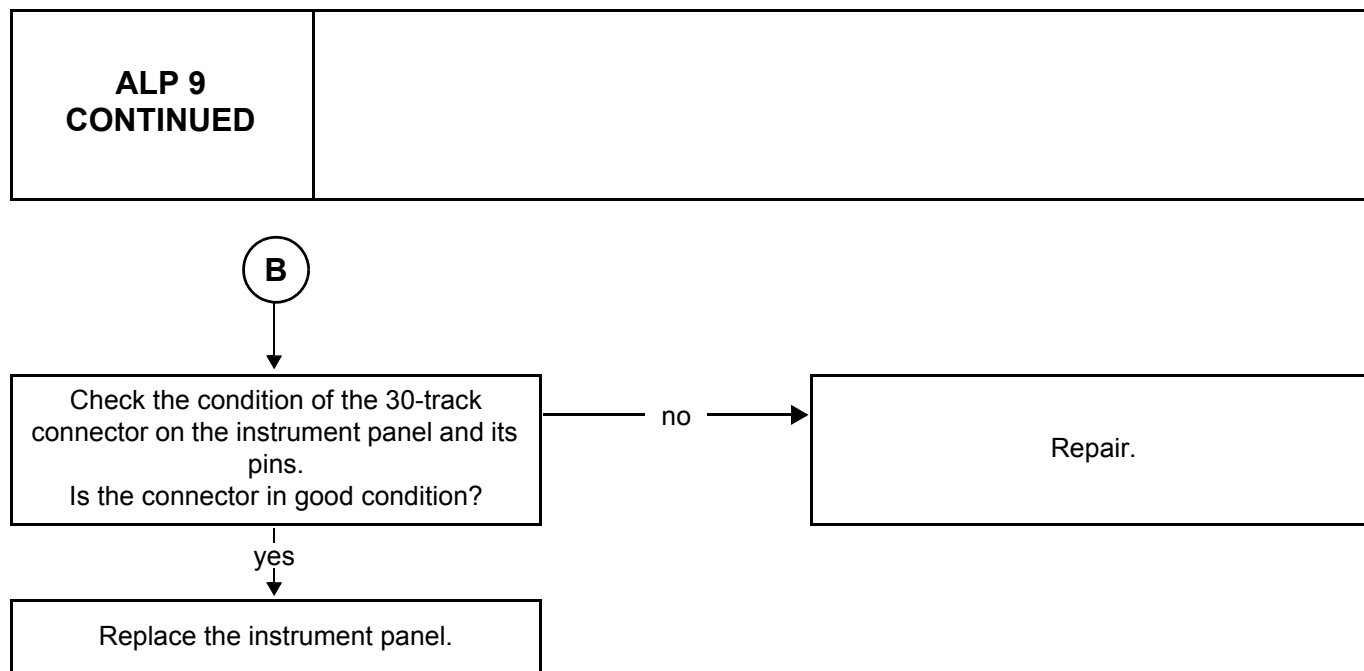
yes

Replace the coolant temperature sensor.

AFTER REPAIR

Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

FAULT FINDING - FAULT FINDING CHARTS



NOTE: clear any faults in the injection computer generated by the previous operations.

AFTER REPAIR

Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

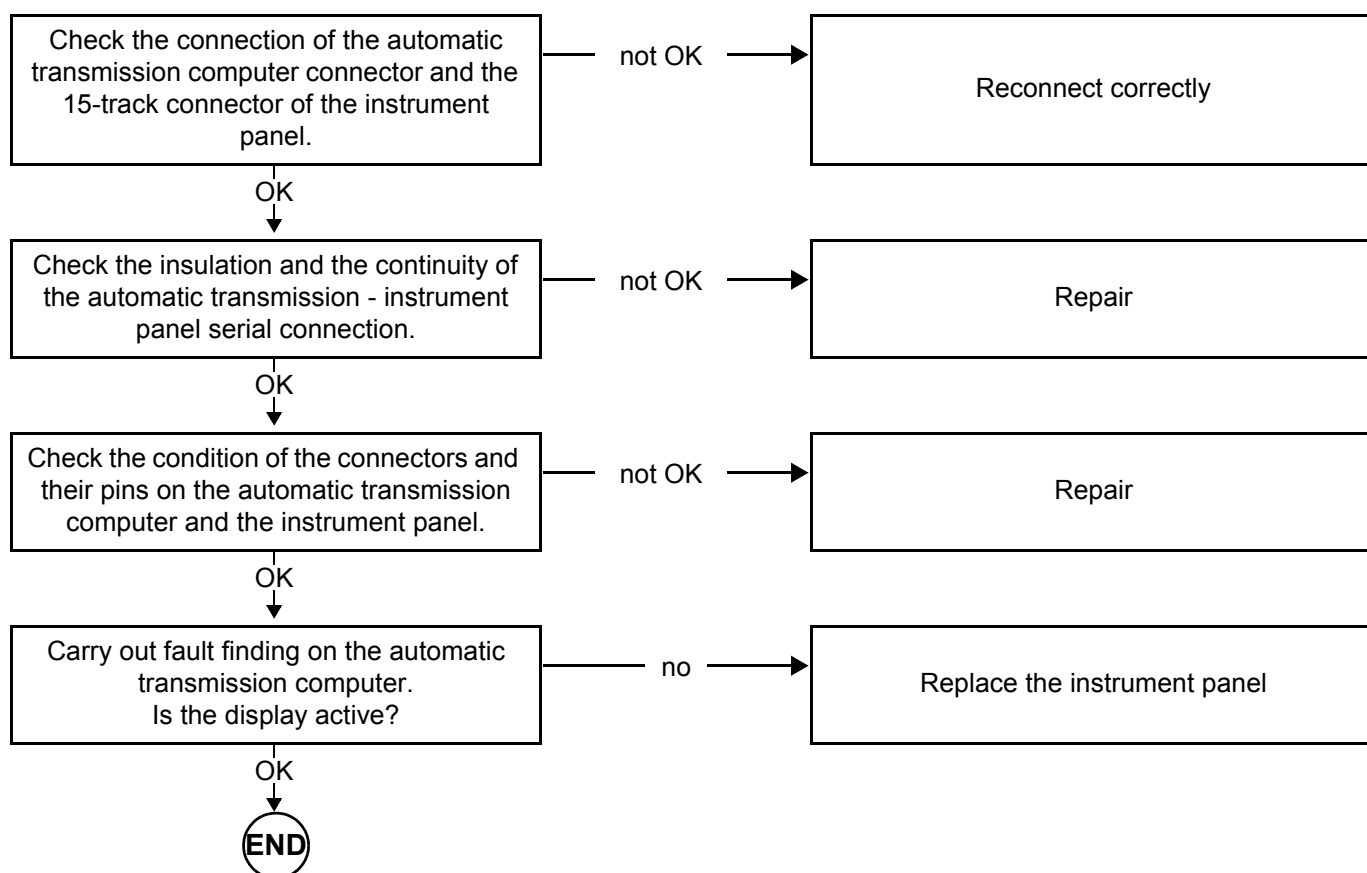
FAULT FINDING - FAULT FINDING CHARTS

ALP 10

**ENGAGED GEAR NOT DISPLAYED, FAULT WARNING LIGHT
CONTINUOUSLY LIT**

NOTES

Fault finding for vehicles equipped with an automatic transmission (ATX). The instrument panel without a rev counter is not concerned



NOTE: clear any faults in the injection computer generated by the previous operations.

AFTER REPAIR

Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

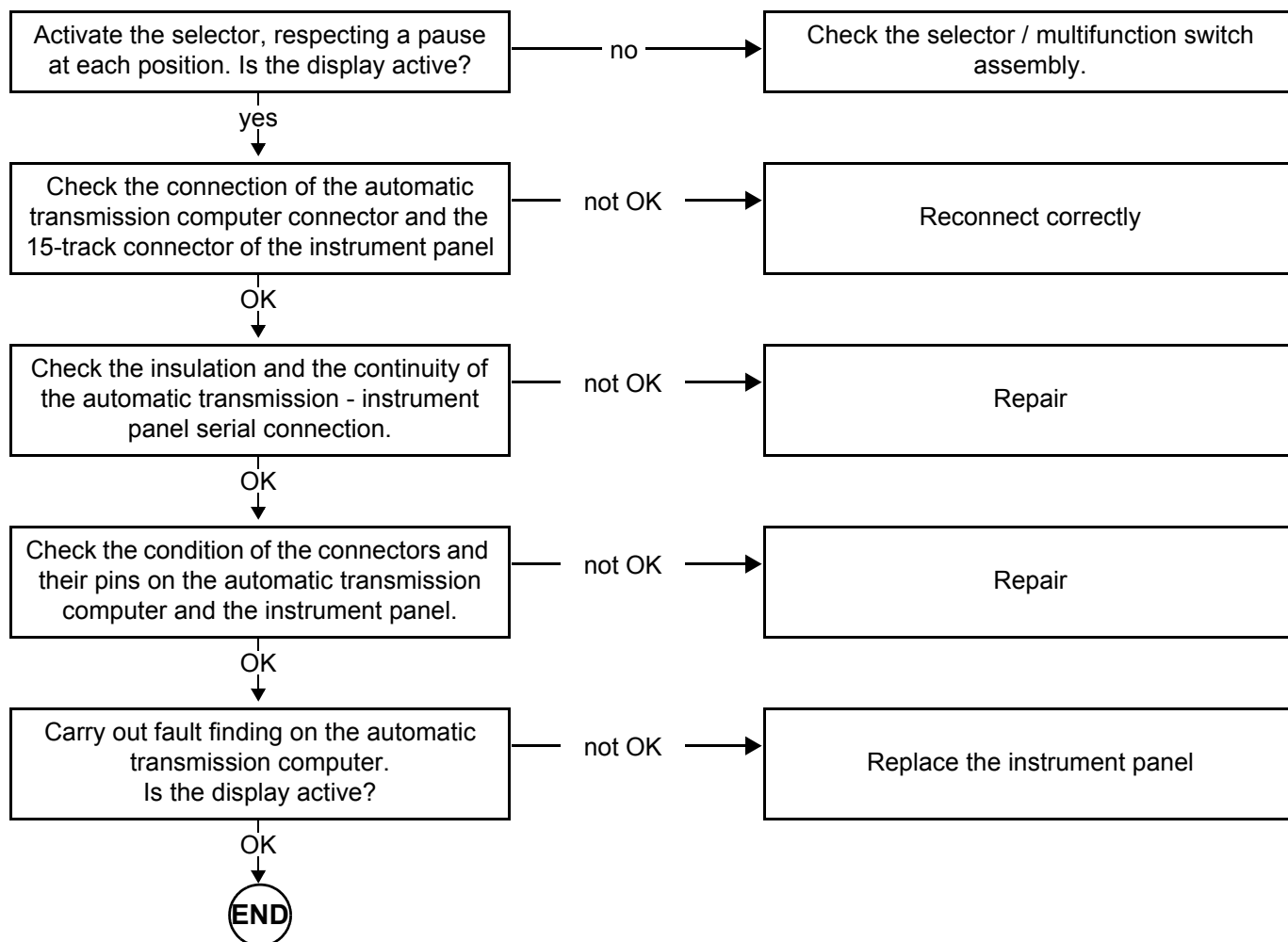
FAULT FINDING - FAULT FINDING CHARTS

ALP 11

ENGAGED GEAR NOT DISPLAED, FAULT WARNING LIGHT OFF

NOTES

Fault finding for vehicles equipped with an automatic transmission (ATX). The instrument panel without a rev counter is not concerned



NOTE: clear any faults in the injection computer generated by the previous operations.

AFTER REPAIR

Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

FAULT FINDING - FAULT FINDING CHARTS

ALP 12

INCONSISTENCY BETWEEN SELECTOR CHOICE AND SIGNAL
DISPLAYED ON THE INSTRUMENT PANEL

NOTES

Fault finding for vehicles equipped with an automatic transmission (ATX). The instrument panel without a rev counter is not concerned

Inconsistency between the selector choice
and the information displayed on the
instrument panel.

This is not a fault relating to
the instrument panel

Check the selector / multifunction switch
assembly.
Is the display consistent?

yes

END

no

Check the automatic transmission /
multifunction switch wiring.
Is the display consistent?

no

Carry out fault finding on the automatic
transmission computer.

yes

END

AFTER REPAIR

Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

FAULT FINDING - FAULT FINDING CHARTS

ALP 13

FAULT WITHOUT WARNING BY WARNING LIGHT (ADDITIONAL TANK)

NOTES

See **Wiring Diagrams Technical Note for Kangoo, Clio II.**

Check **condition** and **connection** of the connectors of the **low fuel level sensor**, component code **2191** and of the **instrument panel**, component code **247**.

Are the tests correct?

no

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

yes

Check the **continuity, insulation**, and the **absence of interference resistance** on the following connection:
MH between components **2191** and **the earth**.

Are the tests correct?

no

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

yes

With the ignition on, disconnect the connector of component **2191** and earth connection **3AFZ** of component **2191**.

Does the warning light come on?

no

Replace the **low fuel level sensor**, component code **2191**.

yes

A

AFTER REPAIR

Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

FAULT FINDING - FAULT FINDING CHARTS

ALP 13
CONTINUED

A

Check the **continuity, insulation**, and the **absence of interference resistance** on the following connection:
3AFZ between components **2191** and **247**.

Are the tests correct?

no

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

yes

Contact the Techline.

AFTER REPAIR

Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

FAULT FINDING - FAULT FINDING CHARTS

ALP 14

THE WARNING LIGHT REMAINS LIT (ADDITIONAL TANK)

NOTES

See **Wiring Diagrams Technical Note for Kangoo, Clio II.**

Check **condition** and **connection** of the connectors of the **low fuel level sensor**, component code **2191** and of the instrument panel, component code **247**.

Are the tests correct?

no

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

yes

Check the insulation against earth of the following connection:
•**3AFZ** between components **2191** and **247**.

Is the check correct?

no

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

yes

Contact the Techline.

AFTER REPAIR

Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

FAULT FINDING - CUSTOMER COMPLAINTS**NOTES**

Consult the "Fault finding - Introduction" section before beginning

Also valid for the UK version (litres = gallons; km = miles, etc.)

FLASHING DASHES ARE DISPLAYED INSTEAD OF FUEL RANGE

ALP 1

INCORRECT FUEL RANGE DISPLAYED

ALP 2

SEVERAL FUNCTIONS REPLACED BY FLASHING DASHES (EXCEPT DIESEL)

ALP 3

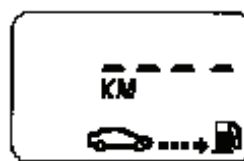
ENGINE COOLANT TEMPERATURE INDICATOR NEEDLE REMAINS AT MAXIMUM
(IGNITION ON) ENGINE COLD

ALP 4

FAULT FINDING - FAULT FINDING CHARTS

ALP1	FLASHING DASHES ARE DISPLAYED INSTEAD OF FUEL RANGE
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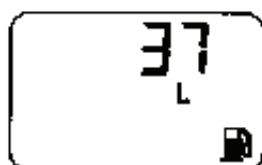
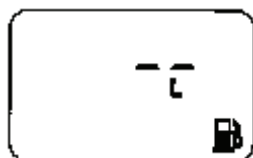
NOTES	Fault finding is performed on the instrument panel with the ignition on. Move on to the fault finding procedure: press and hold the trip computer button at the end of the wiper stalk and switch on the ignition
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FLASHING DASHES ARE DISPLAYED
INSTEAD OF FUEL RANGE

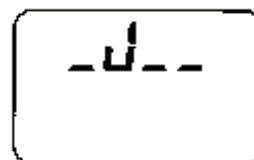
M (Miles) for UK

FUEL RANGE

Briefly press the button at the end of the wiper stalk to select the desired display.



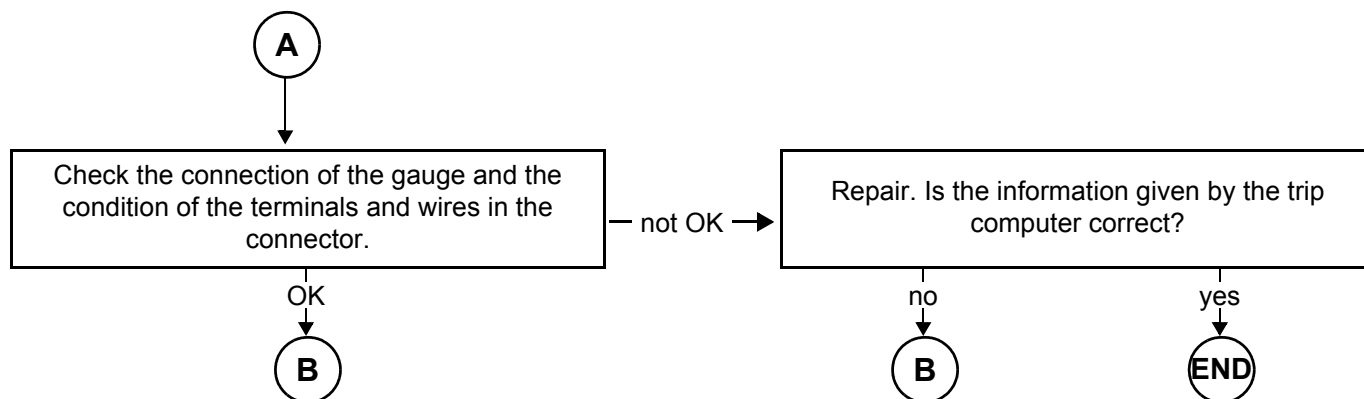
and



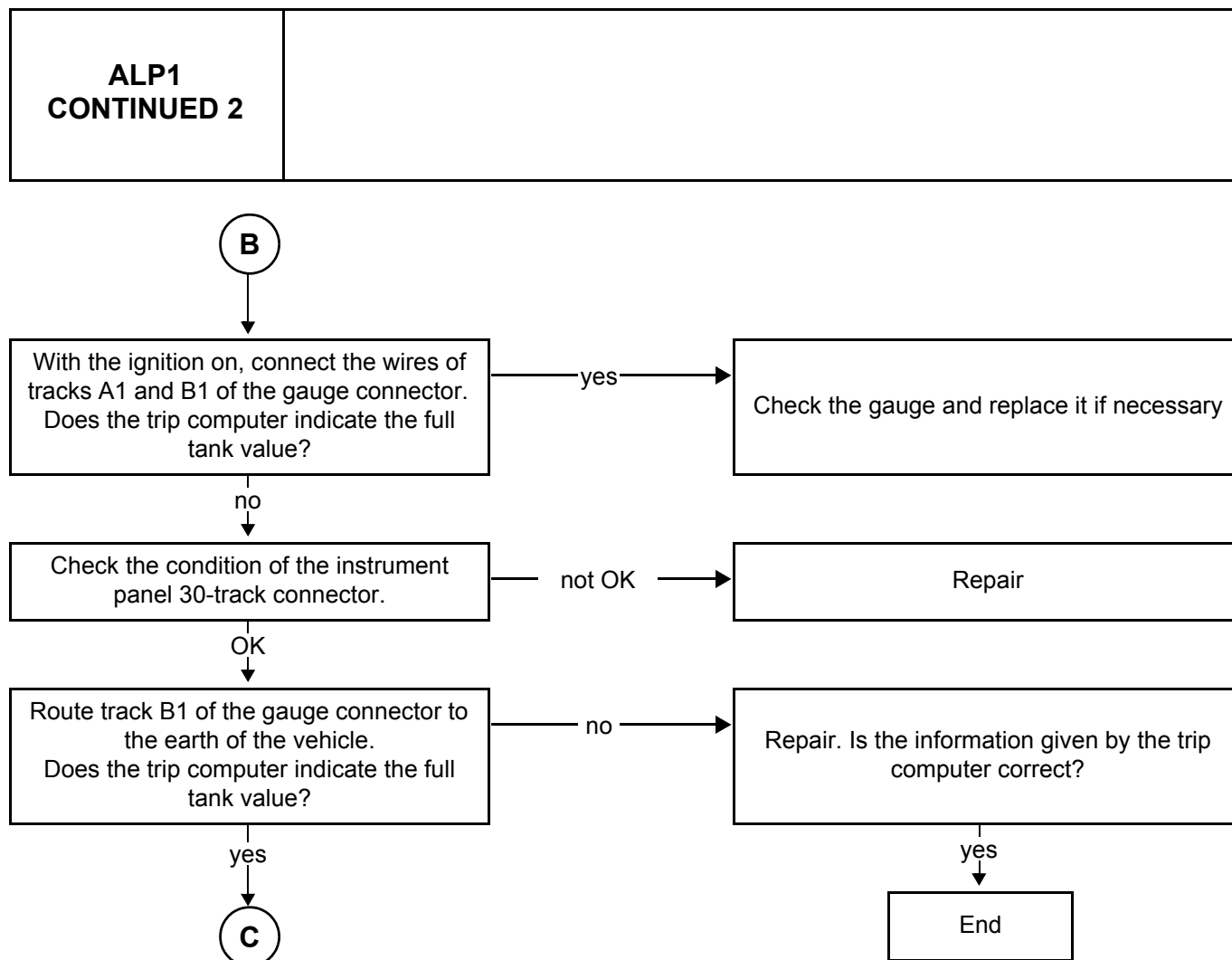
Detection of a gauge fault.

The value displayed (amount of petrol remaining) must be related to the gauge resistance R. If $280\ \Omega < R < 340\ \Omega$ (reserve), 5 is displayed and the warning light is lit.

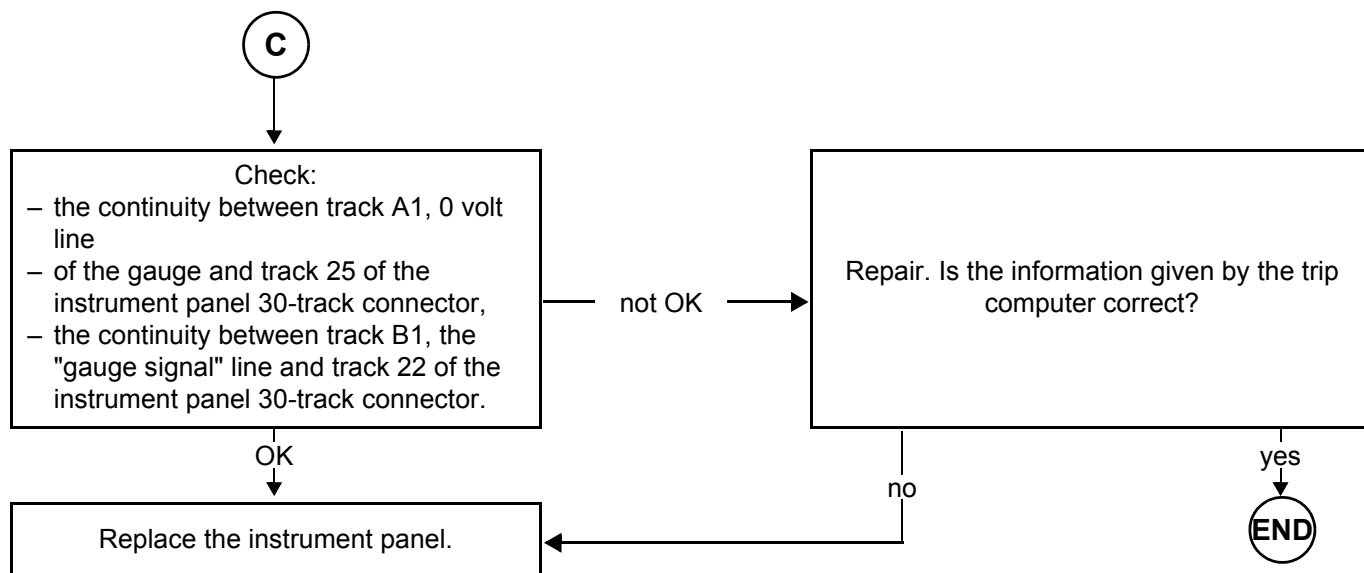
AFTER REPAIR	Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.
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FAULT FINDING - FAULT FINDING CHARTS**ALP1
CONTINUED 1****AFTER REPAIR**

Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

FAULT FINDING - FAULT FINDING CHARTS**AFTER REPAIR**

Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

FAULT FINDING - FAULT FINDING CHARTS**ALP1
CONTINUED 3****AFTER REPAIR**

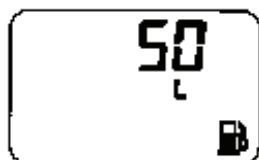
Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

FAULT FINDING - FAULT FINDING CHARTS

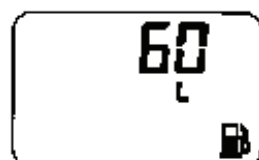
ALP2	INCORRECT FUEL RANGE DISPLAYED
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NOTES	Fault finding is performed on the instrument panel with the ignition on. Move on to the fault finding procedure: press and hold the trip computer button at the end of the wiper stalk and switch on the ignition
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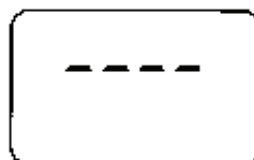
Briefly press the button at the end of the wiper stalk to select the desired display.

CLIO II

or

**MEGANE**

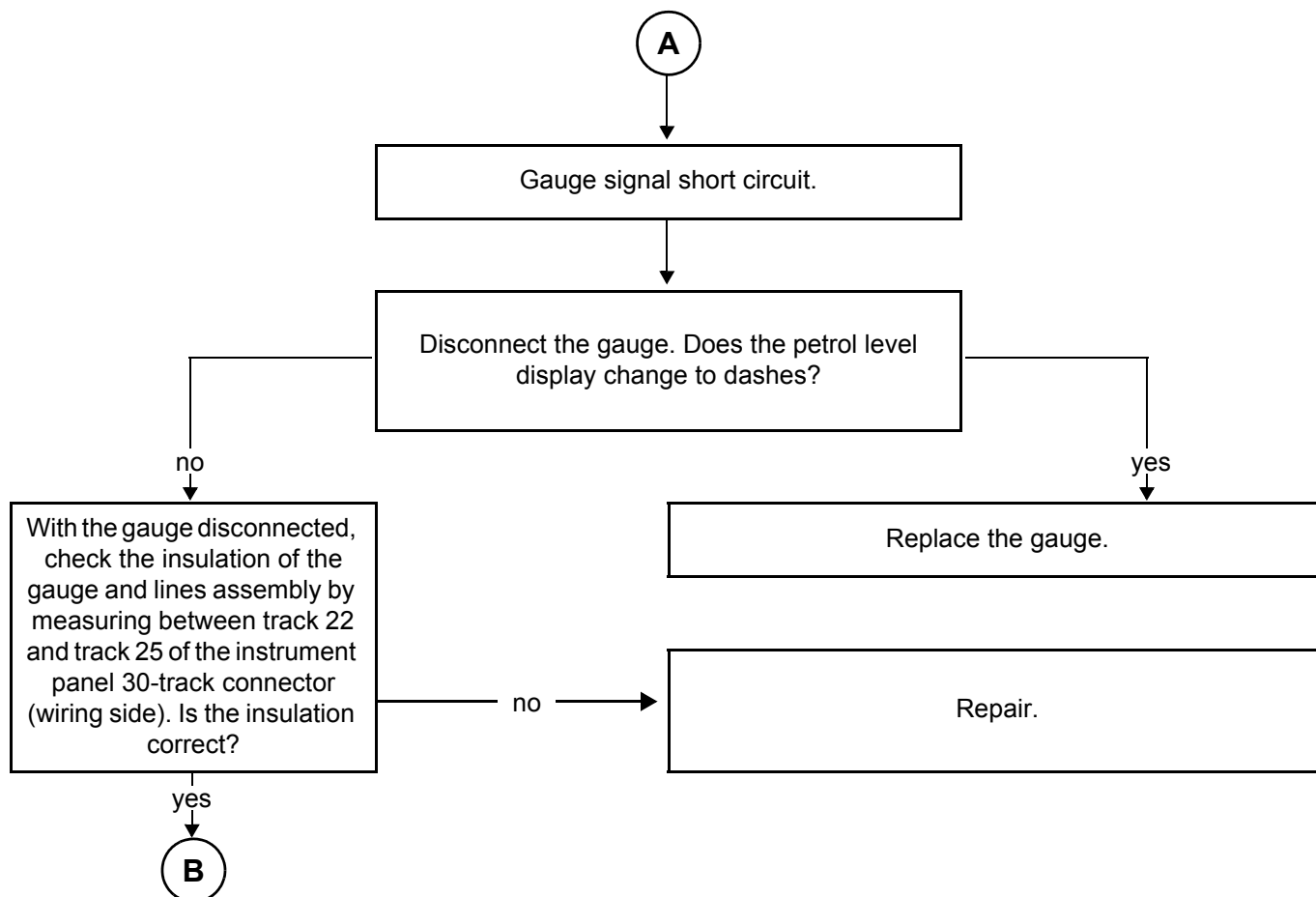
and



No gauge fault detected.

Maximum petrol level displayed when the tank is not full.

AFTER REPAIR	Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.
---------------------	--

FAULT FINDING - FAULT FINDING CHARTS**ALP2
CONTINUED 1****AFTER REPAIR**

Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

FAULT FINDING - FAULT FINDING CHARTS**ALP2
CONTINUED 2****B**

Check the condition of the instrument panel connectors and their pins. Are the connectors correct?

no

Repair.

yes

Replace the instrument panel.

AFTER REPAIR

Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

FAULT FINDING - FAULT FINDING CHARTS

ALP 3	SEVERAL FUNCTIONS REPLACED BY FLASHING DASHES (*) (EXCEPT DIESEL)
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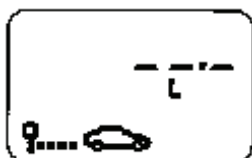
NOTES	Fault finding is performed on the instrument panel with the ignition on. Move on to the fault finding procedure: press and hold the trip computer button at the end of the wiper stalk and switch on the ignition
--------------	--

Briefly press the button at the end of the wiper stalk to select the desired display.

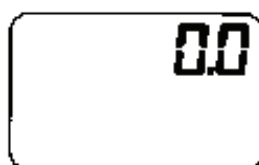
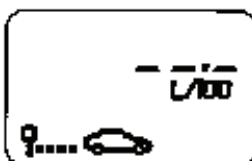
Engine running

Trip computer pages (*)
likely to flash:

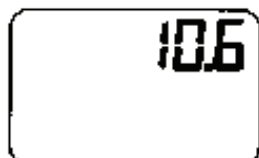
FUEL CONSUMED (G)



AVERAGE
CONSUMPTION
(MPG)

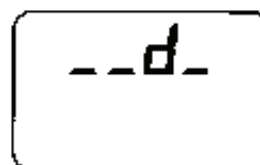


and



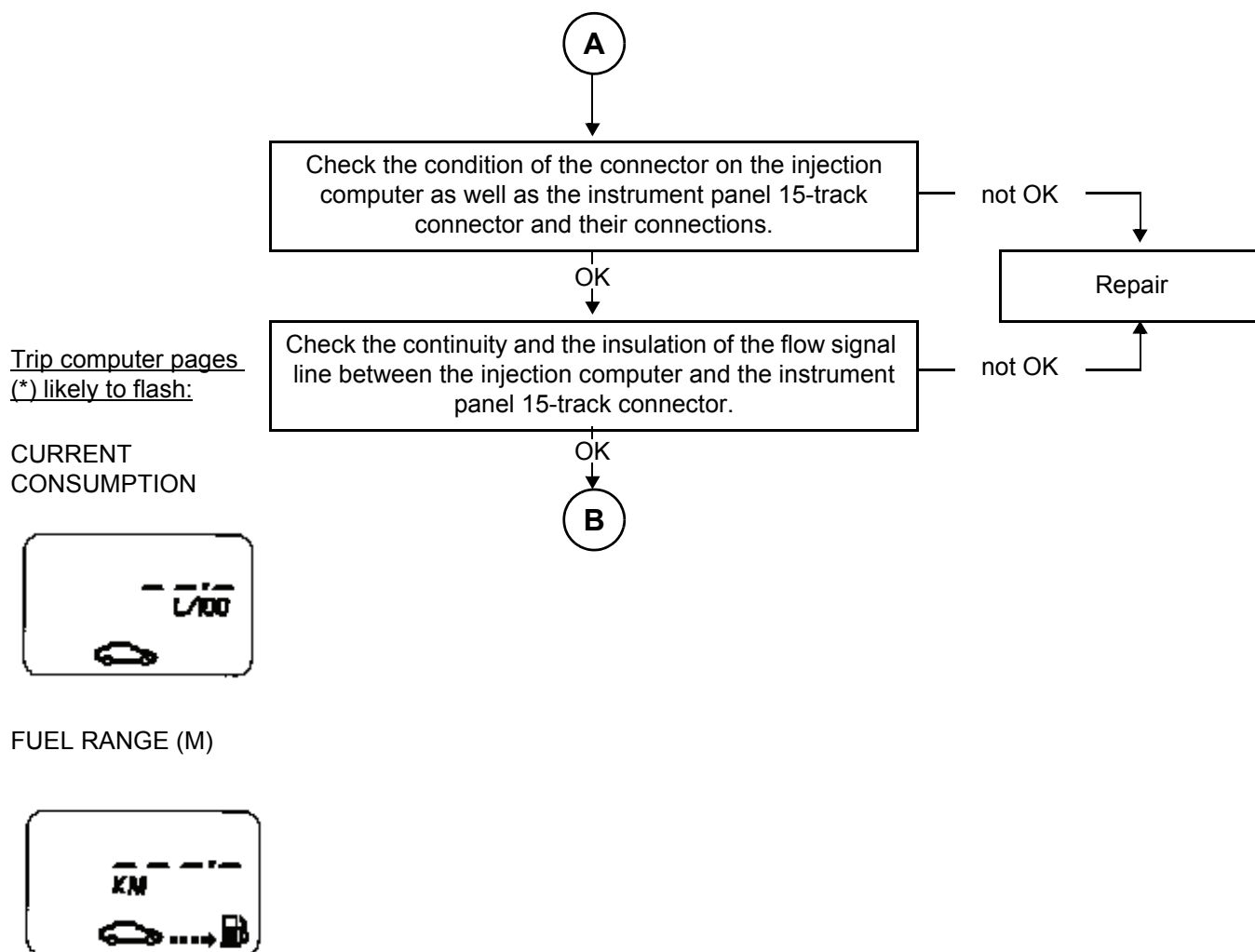
Current flow in litres / hour

and



Flow signal fault detected

AFTER REPAIR	Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.
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FAULT FINDING - FAULT FINDING CHARTS**ALP 3
CONTINUED 1****AFTER REPAIR**

Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

FAULT FINDING - FAULT FINDING CHARTS**ALP 3
CONTINUED 2****B**

Carry out fault finding on the injection computer.
Check the flow signal information.
Is it correct?

no

Replace the injection computer.

yes

Replace the instrument panel.

AFTER REPAIR

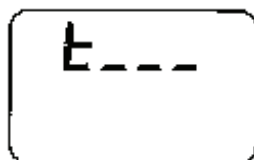
Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

FAULT FINDING - FAULT FINDING CHARTS

ALP4	ENGINE COOLANT TEMPERATURE INDICATOR NEEDLE REMAINS AT MAXIMUM (IGNITION ON) ENGINE COLD
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NOTES	Fault finding is performed on the instrument panel with the ignition on. Move on to the fault finding procedure: press and hold the trip computer button at the end of the wiper stalk and switch on the ignition
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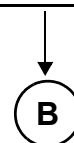
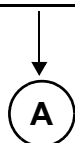
Press the trip computer scroll button to display the sensor fault page.



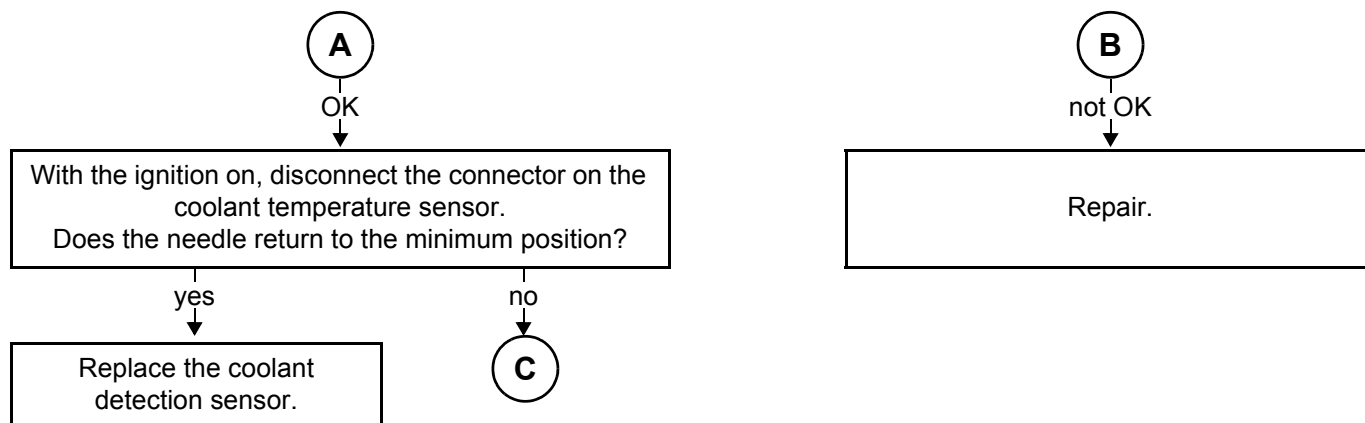
Coolant temperature sensor fault detected.

Short circuit on the coolant temperature input of the instrument panel by earthing.

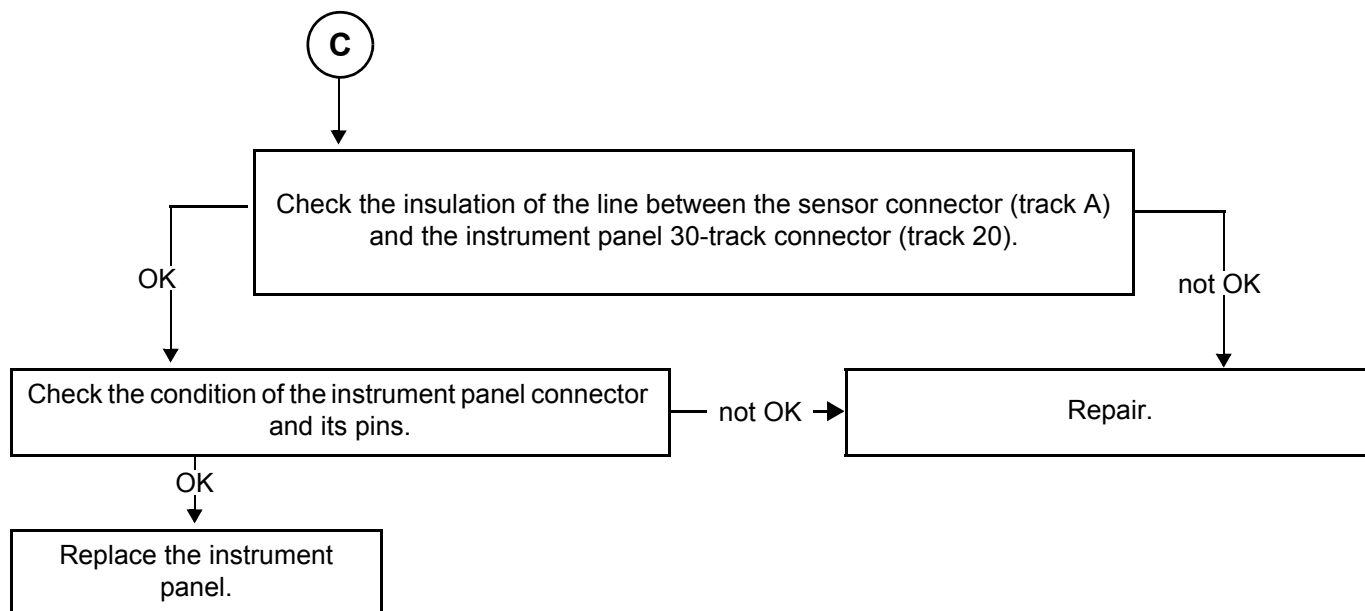
Check the connection of the sensor and the condition of the terminals and wires in the connector.

**AFTER REPAIR**

Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

FAULT FINDING - FAULT FINDING CHARTS**ALP4
CONTINUED 1****AFTER REPAIR**

Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.

FAULT FINDING - FAULT FINDING CHARTS**ALP4
CONTINUED 2****AFTER REPAIR**

Adjust the various instrument panel functions (clock, reset the trip computer pages, etc.) if necessary. Check that all of the instrument panel functions operate correctly.