

RENAULT

Workshop Repair Manual

N.T. 2863A

All types

Basic manual: **M.R. 302 - M.R. 307 - M.R. 311 - M.R. 312**
M.R. 291 - M.R. 293

INSTRUMENT PANEL

77 11 196 407

OCTOBER 1997

Edition Anglaise

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

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

All copyrights reserved by Renault.

Copying or translating, in part or in full, of this document or use of the service part reference numbering system is forbidden without the prior written authority of Renault.



Renault 1997

Contents

Pages

83

INSTRUMENT PANEL

- **Instrument panel with or without trip computer**

All types

Fault finding - Introduction	83-1
Fault finding - Customer complaints	83-2
Fault finding charts	83-4

- **Conventional instrument panel with trip computer**

Mégane

Fault finding - Customer complaints	83-21
Fault finding charts	83-22

Safrane except GB version

Fault finding - Customer complaints	83-32
Fault finding charts	83-33

Safrane GB version

Fault finding - Customer complaints	83-51
Fault finding charts	83-52

Laguna

Fault finding - Customer complaints	83-70
Fault finding charts	83-71

FAULT FINDING - INTRODUCTION

PRECAUTION

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

For all checks and measurements carried out on the 30-way connector of certain instrument panels, always use bornier Elé. **1302**.

Bornier **Elé. 1302** enables:

- continuities to be checked. To do this, simply connect the bornier to the 30-way instrument panel connector or to the connector at the vehicle wiring end,
- voltages or frequencies to be measured, frequencies to be generated, etc... To do this, connect the bornier in series between the instrument panel unit and the connector at the vehicle wiring end.

FAULT FINDING - CUSTOMER COMPLAINTS

NOTES	Refer to the "Fault finding - Introduction" section before beginning this fault finding procedure.
-------	--

DIESEL REV COUNTER PROBLEM

No needle movement or needle vibrates or oscillates CHART 1

PETROL REV COUNTER PROBLEM

No needle movement or needle vibrates or oscillates CHART 2

SPEEDOMETER PROBLEM (vehicles fitted with a speedometer cable)

Needle oscillates or total mileage recorder is noisy CHART 3

No needle movement and total mileage recorder does not operate CHART 4

Needle sticks (for example: at 80 km/h) but total mileage recorder operates CHART 5

No needle movement but total mileage recorder operates or needle movement correct but total mileage recorder does not operate CHART 6

SPEEDOMETER PROBLEM (vehicles fitted with an electric speedometer)

Needle vibrates or oscillates or no needle movement and total mileage recorder does not operate CHART 7

No needle movement, but total mileage recorder operates or needle movement correct but total mileage recorder does not operate CHART 8

FUEL LEVEL RECEIVER PROBLEM

No fuel level information on needle receiver (tank not empty) CHART 9

Fuel level receiver needle remains stuck in the maximum position (ignition on) when the tank is not full CHART 10

FAULT FINDING - CUSTOMER COMPLAINTS

NOTES	Refer to the "Fault finding - Introduction" section before beginning this fault finding procedure.
-------	--

OIL LEVEL RECEIVER PROBLEM

	No needle movement and no lighting of the level and temperature scale	CHART 11
	Needle operates correctly but scale does not light up	CHART 12
	Lighting of the scale correct but no needle movement	CHART 13
	Graduation of combined oil level indicator does not light up when ignition is switched on and display passes straight to general total mileage recorder (MEGANE except Scénic)	CHART 14

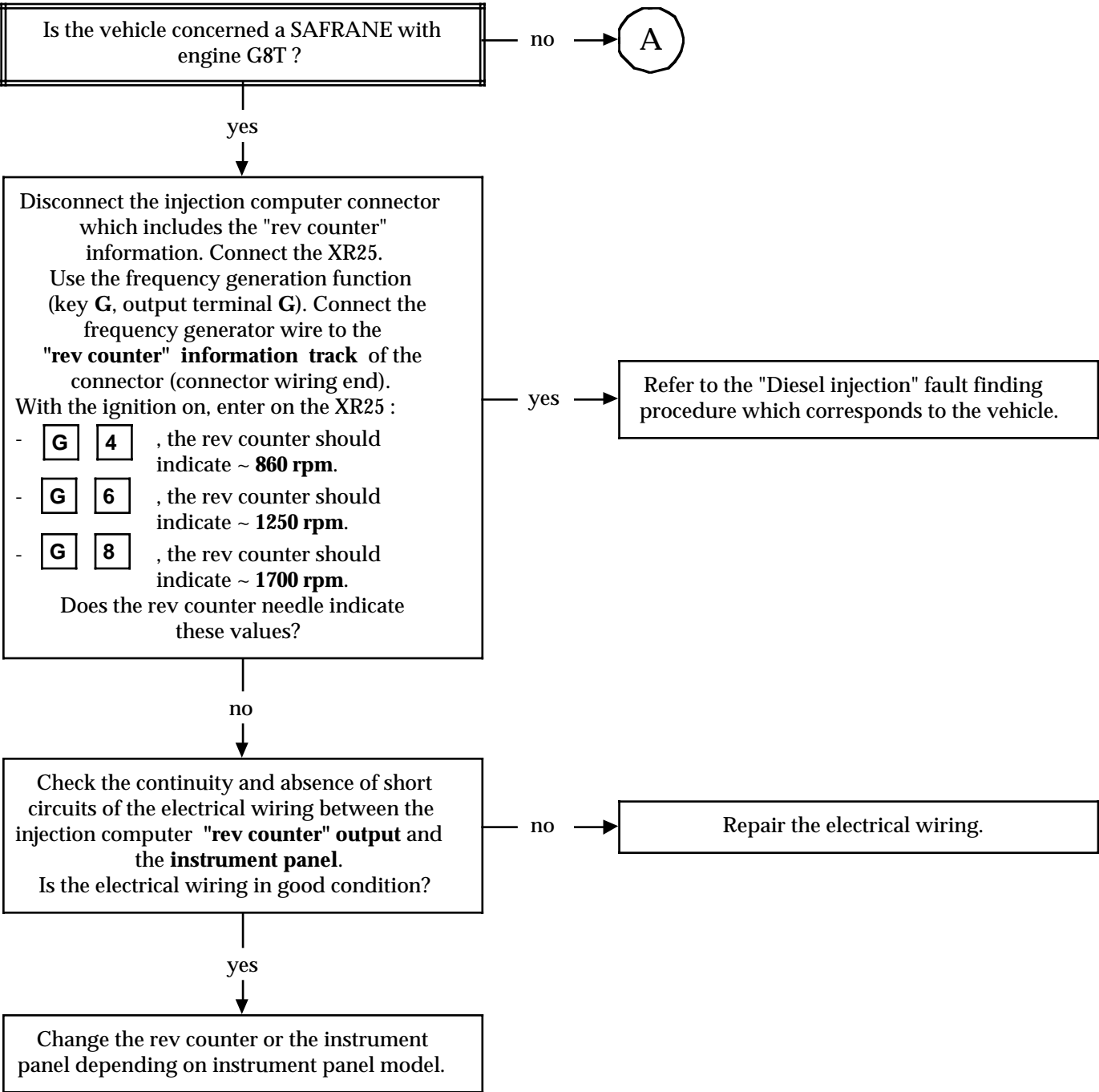
COOLANT TEMPERATURE RECEIVER PROBLEM

	No needle movement	CHART 15
--	--------------------	----------

FAULT FINDING CHARTS

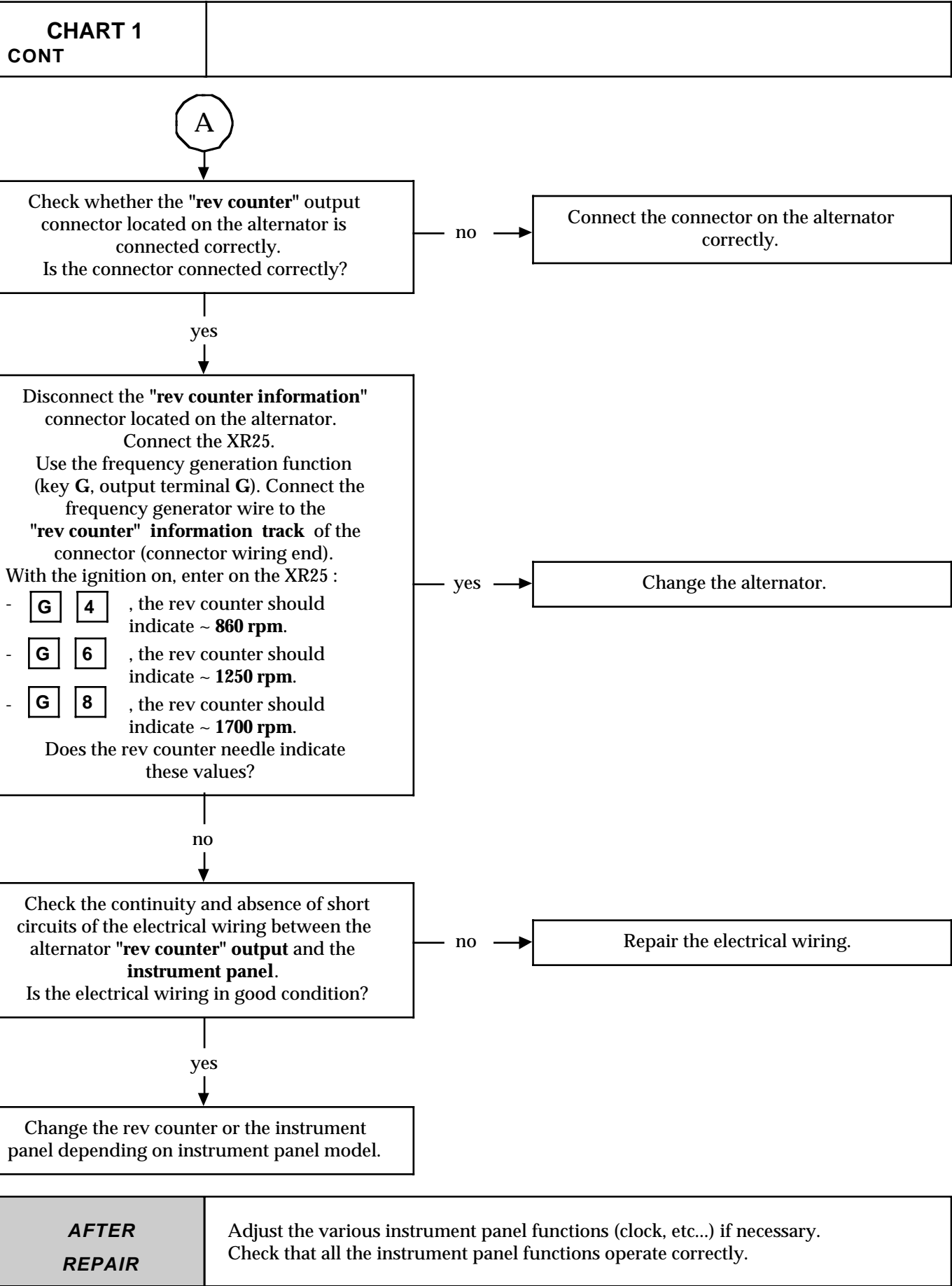
CHART 1	DIESEL REV COUNTER PROBLEM No rev counter needle movement or needle vibrates or oscillates on the instrument panel
----------------	---

NOTES	Check that the system connectors are engaged correctly. Take care not to damage the connectors during checks. Check that the engine earth is in good condition.
--------------	---



AFTER REPAIR	Connect the XR25 and use the diesel injection fault finding fiche. With the engine running, check that the engine speed value read on the rev counter corresponds to the value displayed on the XR25. Check that all the instrument panel functions operate correctly.
---------------------	--

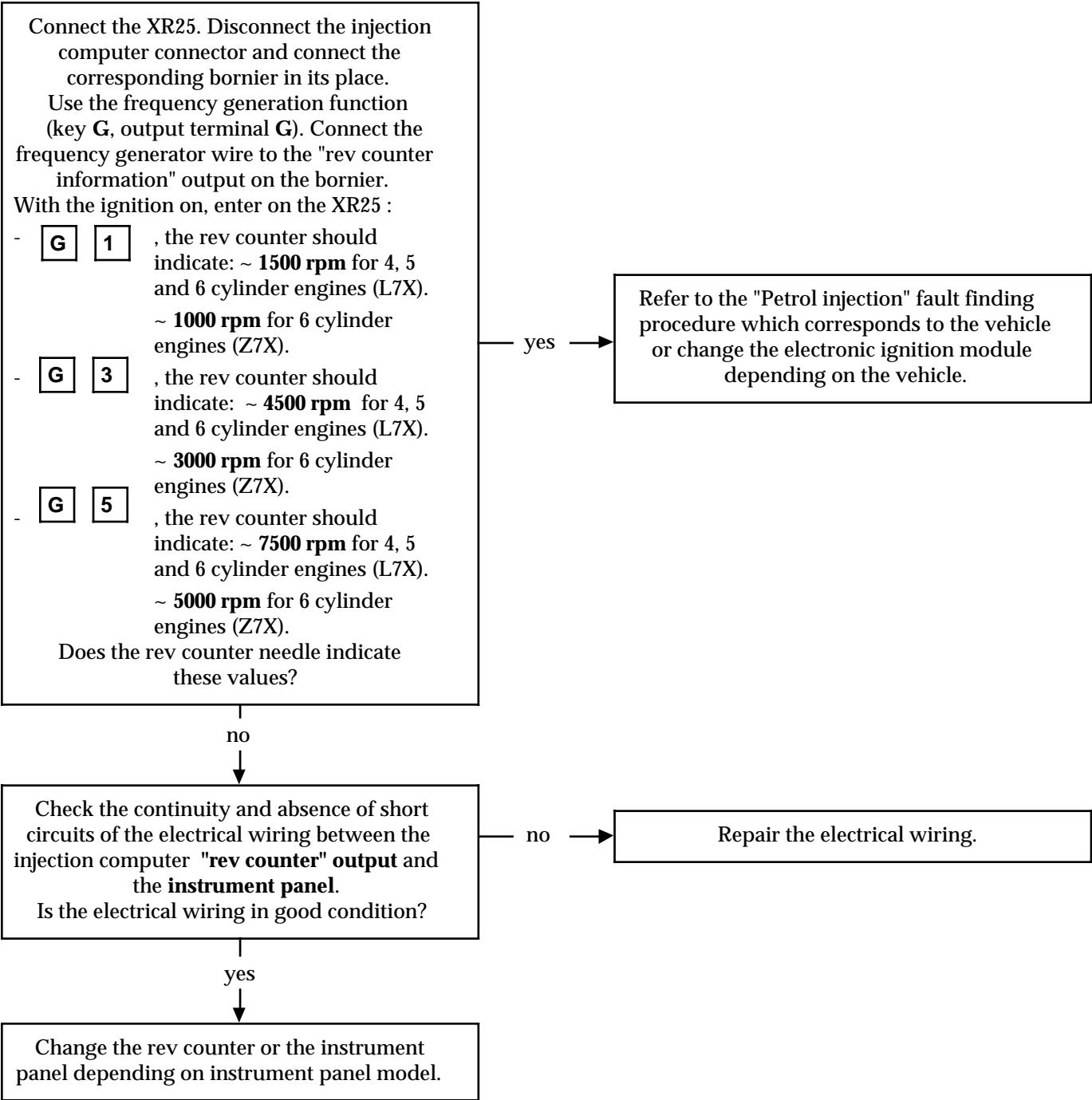
FAULT FINDING CHARTS



FAULT FINDING CHARTS

CHART 2	PETROL REV COUNTER PROBLEM No rev counter needle movement or needle vibrates or oscillates on the instrument panel
---------	---

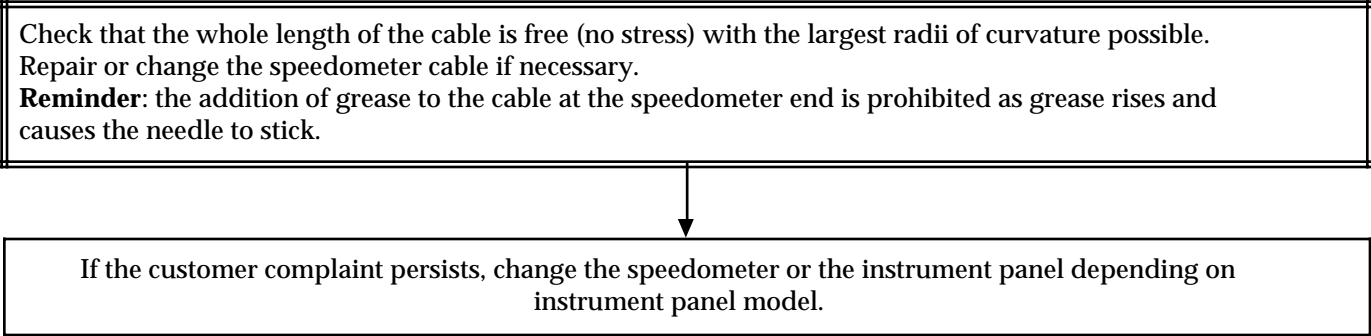
NOTES	Check that the system connectors are engaged correctly. Take care not to damage the connectors during checks. Check that the engine earth is in good condition.
-------	---



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

FAULT FINDING CHARTS

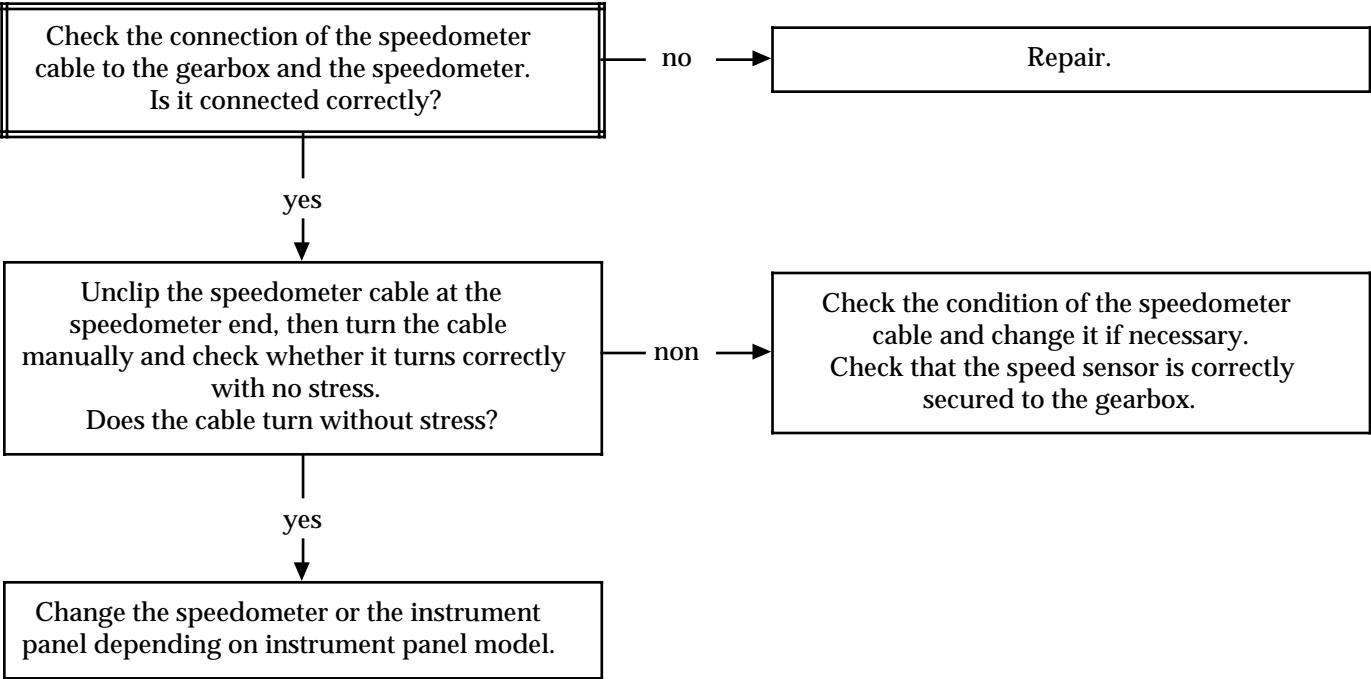
CHART 3	SPEEDOMETER PROBLEM (vehicles fitted with a speedometer cable) Needle oscillates or total mileage recorder is noisy
NOTES	Check that the system connectors are engaged correctly. Before beginning this fault finding procedure, set the trip recorder to zero then check whether the customer complaint persists.



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

FAULT FINDING CHARTS

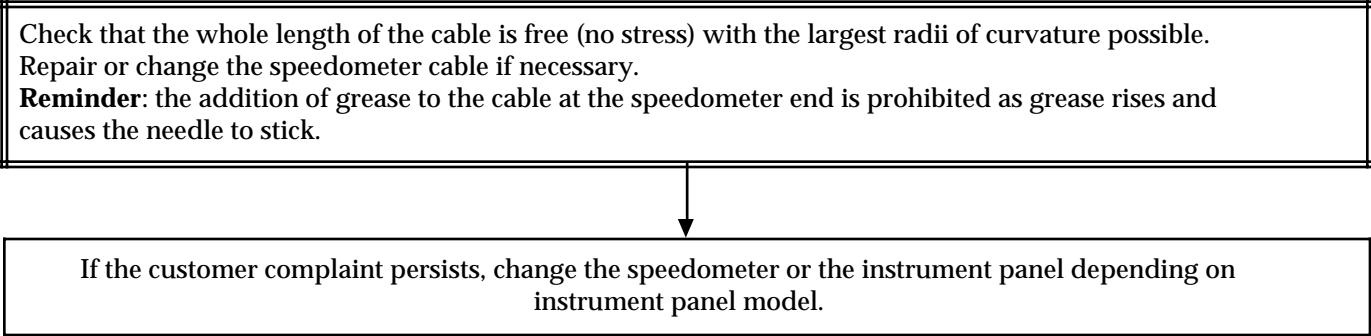
CHART 4	SPEEDOMETER PROBLEM (vehicles fitted with a speedometer cable) No needle movement and total mileage recorder does not operate
NOTES	Check that the system connectors are engaged correctly. Before beginning this fault finding procedure, set the trip recorder to zero then check whether the customer complaint persists.



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

FAULT FINDING CHARTS

CHART 5	SPEEDOMETER PROBLEM (vehicles fitted with a speedometer cable) Needle sticks (eg.: at 80 km/h) but total mileage recorder operates
NOTES	Check that the system connectors are engaged correctly. Before beginning this fault finding procedure, set the trip recorder to zero then check whether the customer complaint persists.



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

FAULT FINDING CHARTS

CHART 6	SPEEDOMETER PROBLEM (vehicles fitted with a speedometer cable). No needle movement, but total mileage recorder operates or needle movement correct but total mileage recorder does not operate
---------	--

NOTES	Check that the system connectors are engaged correctly. Reminder: the addition of grease to the cable at the speedometer end is prohibited as grease rises and causes the needle to stick.
-------	--

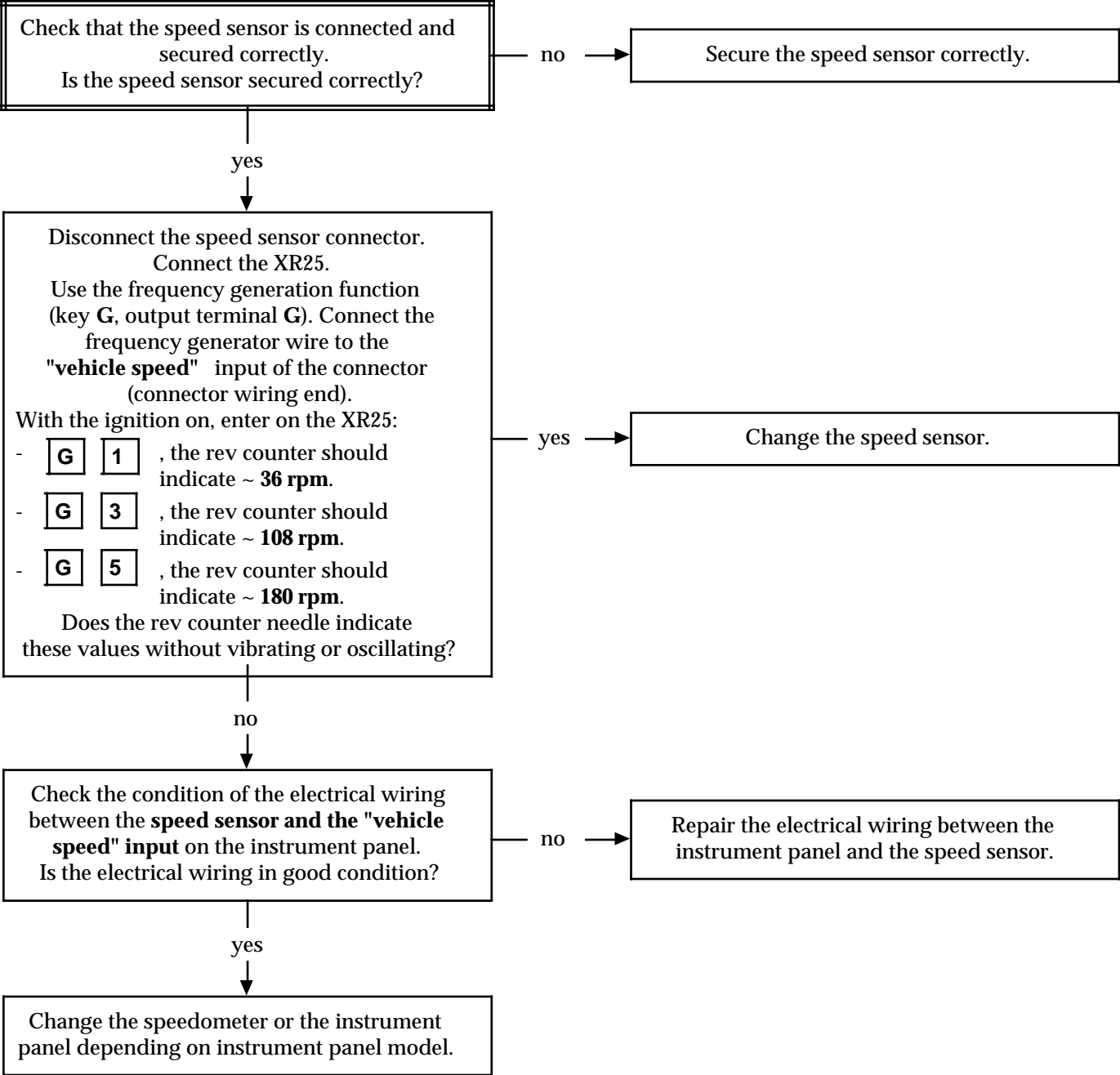
If the customer complaint persists, change the speedometer or the instrument panel depending on instrument panel model.

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

FAULT FINDING CHARTS

CHART 7	SPEEDOMETER PROBLEM (vehicles fitted with an electric speedometer). Needle vibrates or oscillates or no needle movement and total mileage recorder does not operate
---------	--

NOTES	Check that the system connectors are engaged correctly. Take care not to damage the connectors during checks.
-------	--

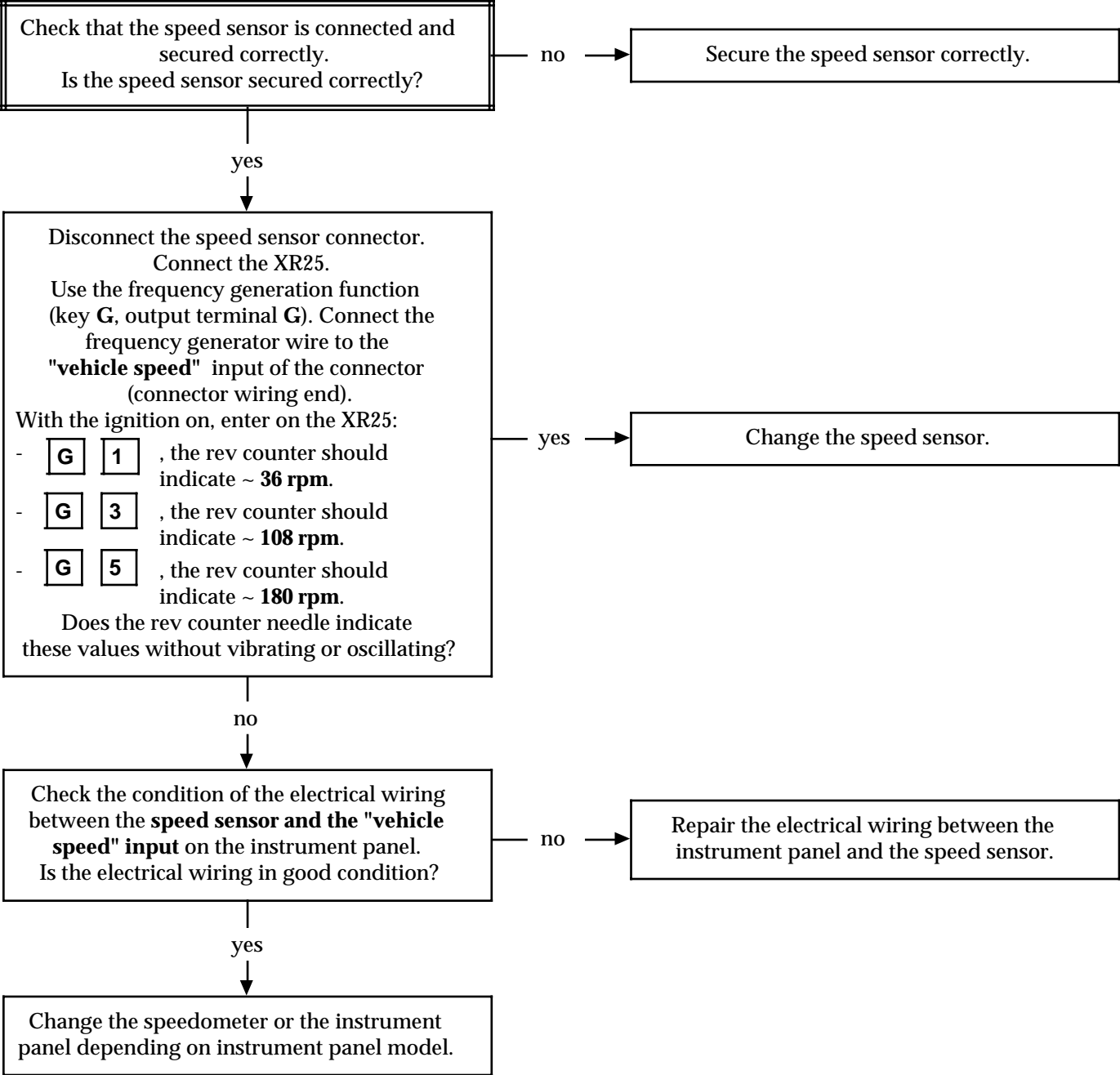


AFTER REPAIR	Adjust the various instrument panel functions (clock, etc...) if necessary. Check that all the instrument panel functions operate correctly.
--------------	---

FAULT FINDING CHARTS

CHART 8	SPEEDOMETER PROBLEM (vehicles fitted with an electric speedometer). No needle movement, but total mileage recorder operates or needle movement correct but total mileage recorder does not operate.
---------	---

NOTES	Check that the system connectors are engaged correctly. Take care not to damage the connectors during checks.
-------	--

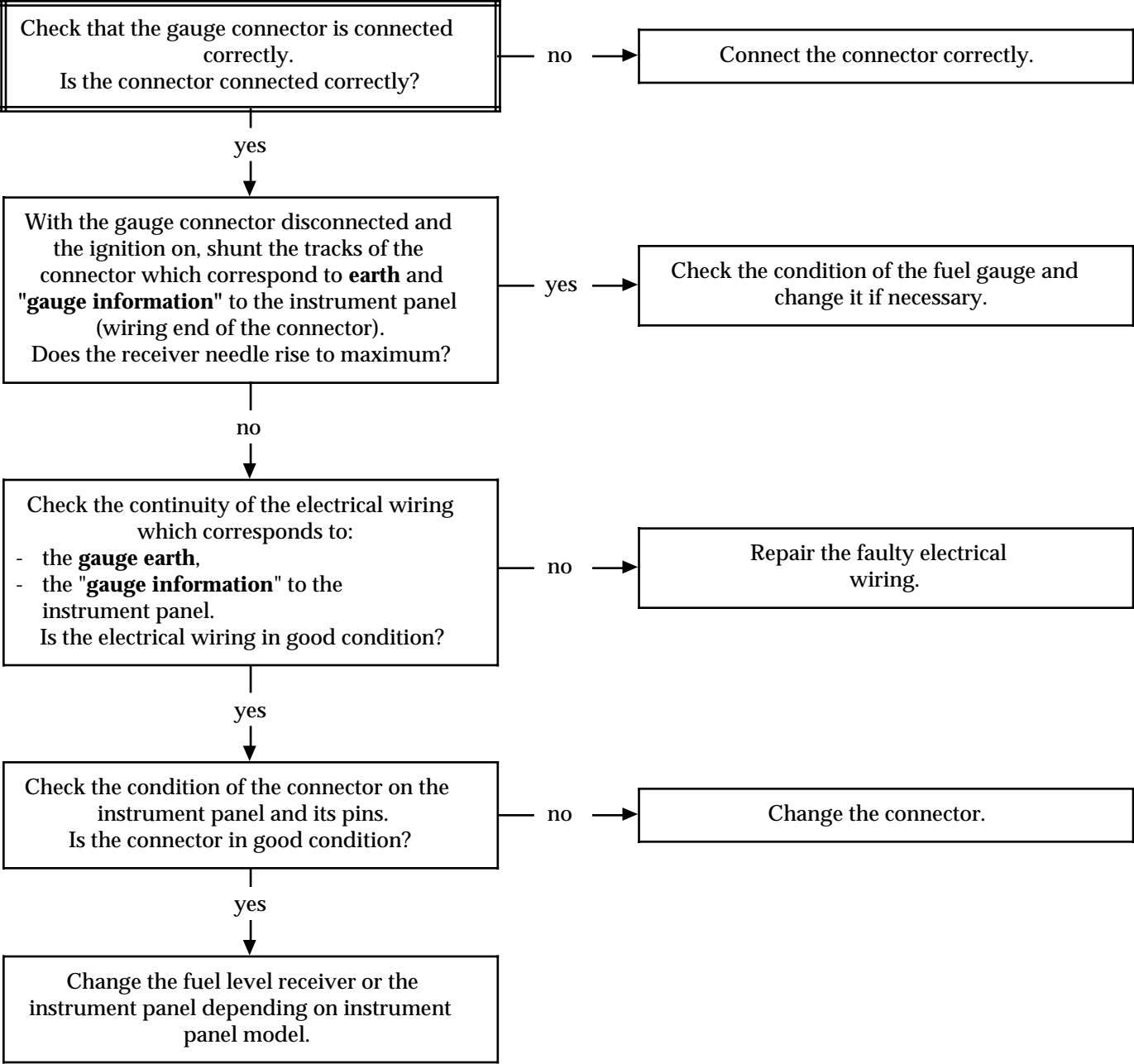


AFTER REPAIR	Adjust the various instrument panel functions (clock, etc...) if necessary. Check that all the instrument panel functions operate correctly.
--------------	---

FAULT FINDING CHARTS

CHART 9	FUEL LEVEL PROBLEM No fuel level information on needle receiver (tank not empty)
---------	--

NOTES	Check that the system connectors are engaged correctly. Take care not to damage the connectors during checks.
-------	--



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

Instrument panel with or without trip computer

FAULT FINDING CHARTS

CHART 10

FUEL LEVEL PROBLEM

Fuel level receiver needle remains stuck in the maximum position.....
(ignition on), tank not full

NOTES

Check that the system connectors are engaged correctly.
Take care not to damage the connectors during checks.

Check that the gauge connector is connected correctly.
Is the connector connected correctly?

no

Connect the connector correctly.

yes

With the ignition on, disconnect the fuel gauge connector. Does the needle fall to the minimum position?

yes

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

no

Check that there are no short circuits of the electrical wiring which corresponds to:
- the **gauge earth**,
- the "**gauge information**" to the instrument panel.
Is the electrical wiring in good condition?

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

Change the connector.

yes

Change the fuel level receiver or the instrument panel depending on instrument panel model.

AFTER REPAIR

Adjust the various instrument panel functions (clock, etc...) if necessary.
Check that all the instrument panel functions operate correctly.

FAULT FINDING CHARTS

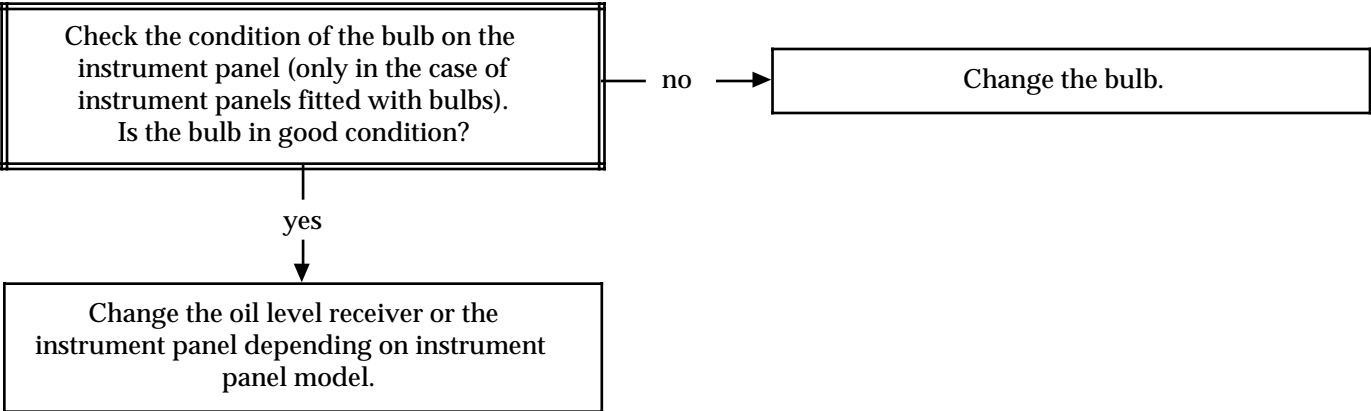
CHART 11	<div>OIL LEVEL RECEIVER PROBLEM</div> <div>No needle movement and no lighting of the level and temperature scale</div>
NOTES	None

Change the oil level receiver or the instrument panel depending on instrument panel model.

AFTER REPAIR	<div>Adjust the various instrument panel functions (clock, etc...) if necessary.</div> <div>Check that all the instrument panel functions operate correctly.</div>
--------------	--

FAULT FINDING CHARTS

CHART 12	OIL LEVEL RECEIVER PROBLEM Needle operates correctly, but scale does not light up
NOTES	None

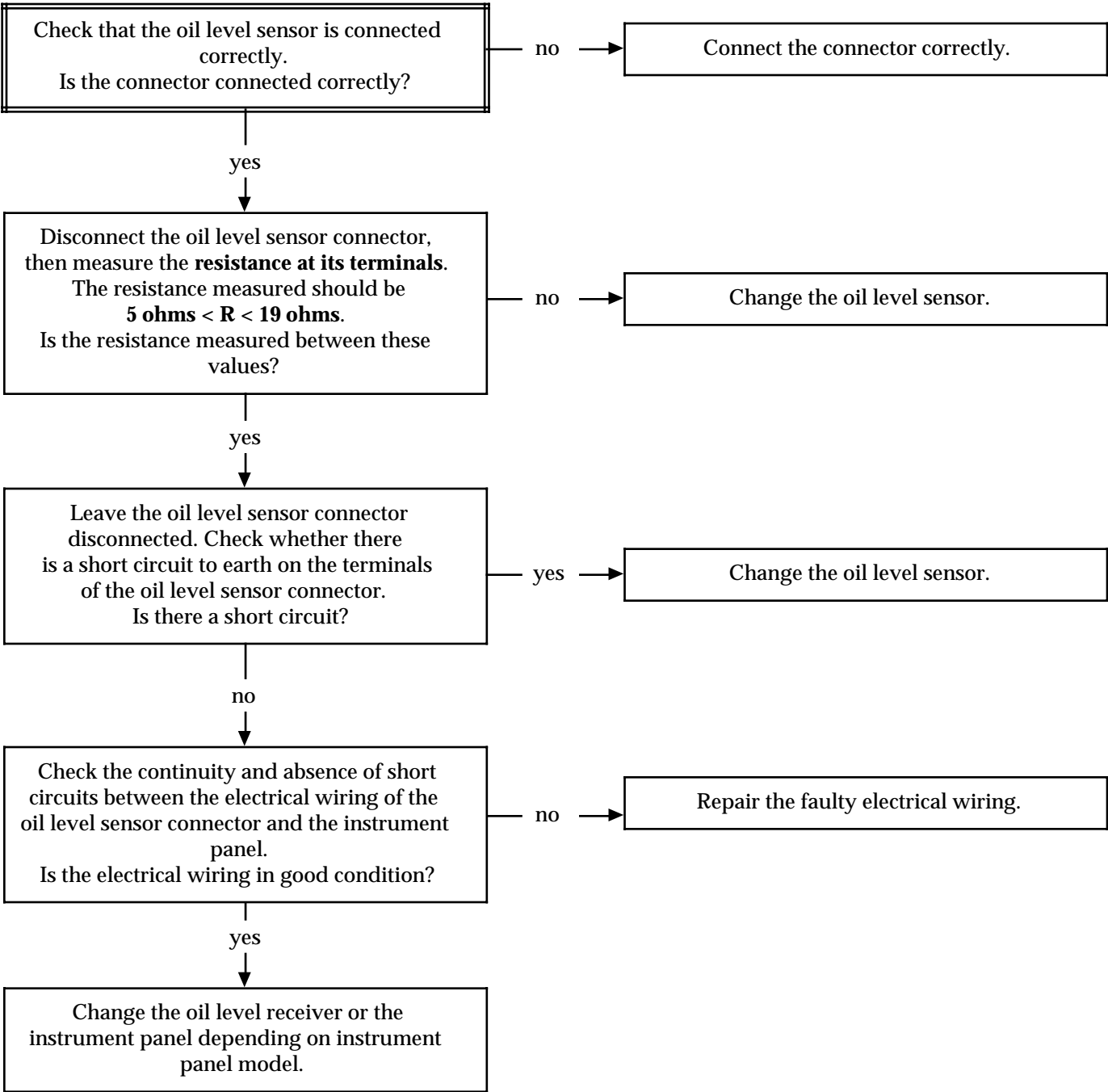


AFTER REPAIR	Adjust the various instrument panel functions (clock, etc...) if necessary. Check that all the instrument panel functions operate correctly.
--------------	---

FAULT FINDING CHARTS

CHART 13	OIL LEVEL RECEIVER PROBLEM Lighting of the scale correct, but no needle movement
----------	--

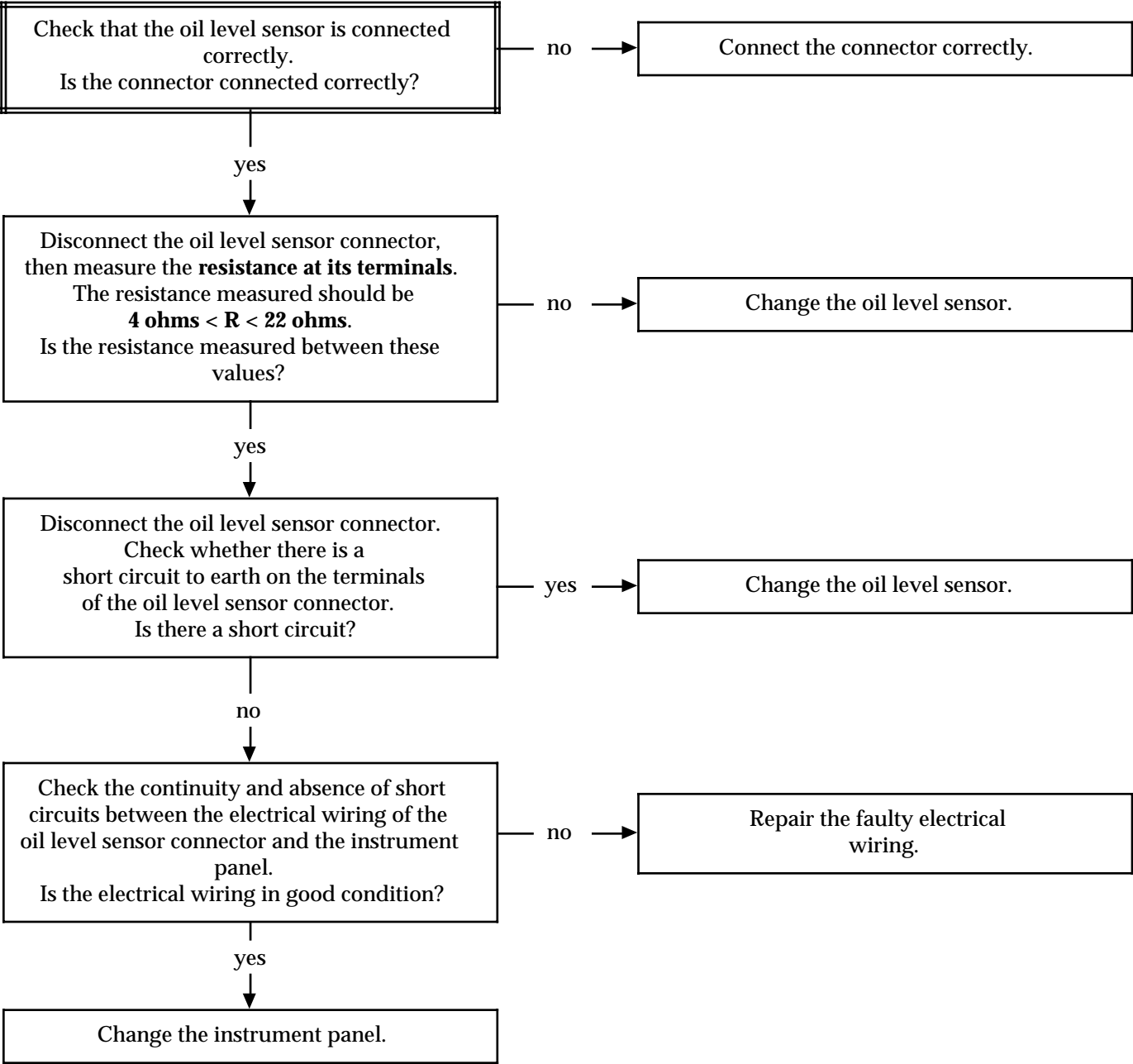
NOTES	Take care not to damage the connectors during checks.
-------	---



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

FAULT FINDING CHARTS

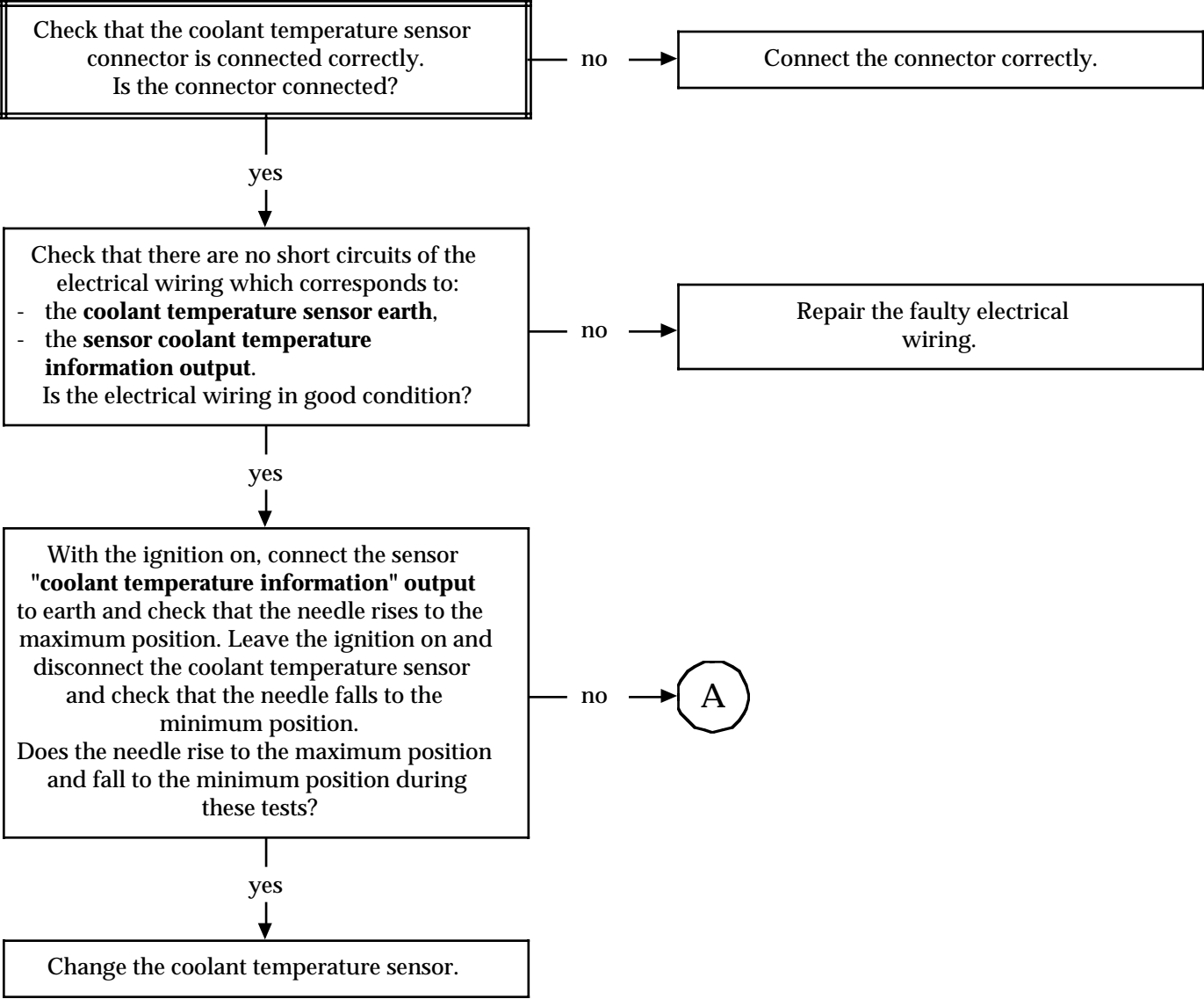
CHART 14	OIL LEVEL RECEIVER PROBLEM Graduation of combined oil level indicator does not light up when ignition is switched on and display passes straight to general total mileage recorder
NOTES	The fault finding procedure which follows only applies to Mégane vehicles. Take care not to damage the connectors during checks.



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

FAULT FINDING CHARTS

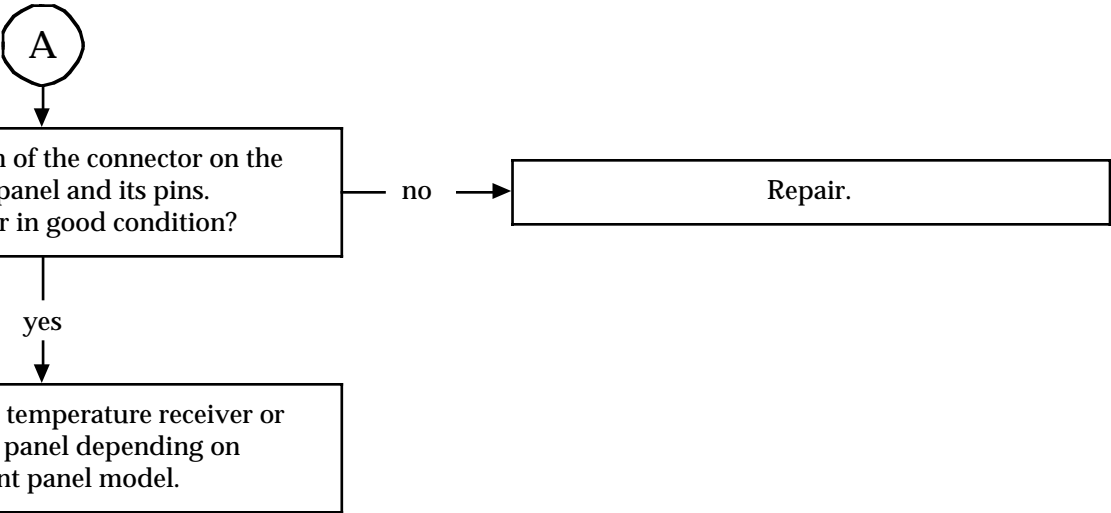
CHART 15	COOLANT TEMPERATURE RECEIVER PROBLEM No needle movement
NOTES	Take care not to damage the connectors during checks.



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

FAULT FINDING CHARTS

CHART 15
CONT



**AFTER
REPAIR**

Adjust the various instrument panel functions (clock, etc...) if necessary.
Check that all the instrument panel functions operate correctly.

FAULT FINDING - CUSTOMER COMPLAINTS

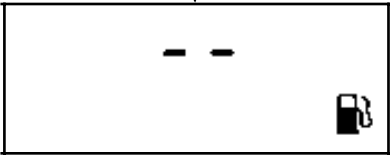
NOTES	Refer to the "Fault finding - Introduction" section before beginning this fault finding procedure.
-------	--

FLASHING DASHES DISPLAYED IN PLACE OF RANGE	CHART 1
FLASHING DASHES SOMETIMES DISPLAYED IN PLACE OF RANGE	CHART 2
INCORRECT RANGE DISPLAY	CHART 3
SEVERAL FUNCTIONS REPLACED BY FLASHING DASHES (except diesel)	CHART 4
OIL LEVEL DISPLAY INCORRECT BUT TOTAL DISTANCE DISPLAYED	CHART 5
NEITHER OIL LEVEL NOR TOTAL DISTANCE DISPLAYED	CHART 6

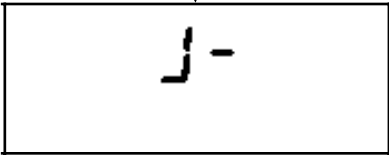
FAULT FINDING CHARTS

CHART 1	FLASHING DASHES DISPLAYED IN PLACE OF RANGE
NOTES	Instrument panel fault finding procedures are carried out with the ignition on. Change to fault finding sequence: - keep the zero reset / reset / trip computer advance button at the end of the windscreen wiper stalk pressed and switch on the ignition.

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



Level of fuel remaining in the tank.
Illumination of fuel low warning light.



Gauge failure detection.

and

Gauge information cut-off.

Check that the gauge is connected correctly and check the condition of the terminals and wires in the connector.

good

poor

With the ignition on, connect the wires of tracks **A1** and **B1** of the gauge connector. Does the trip computer indicate the tank full value?

yes

no

Check the gauge and change it if necessary.



Repair.
Is the information given by the trip computer correct?

yes

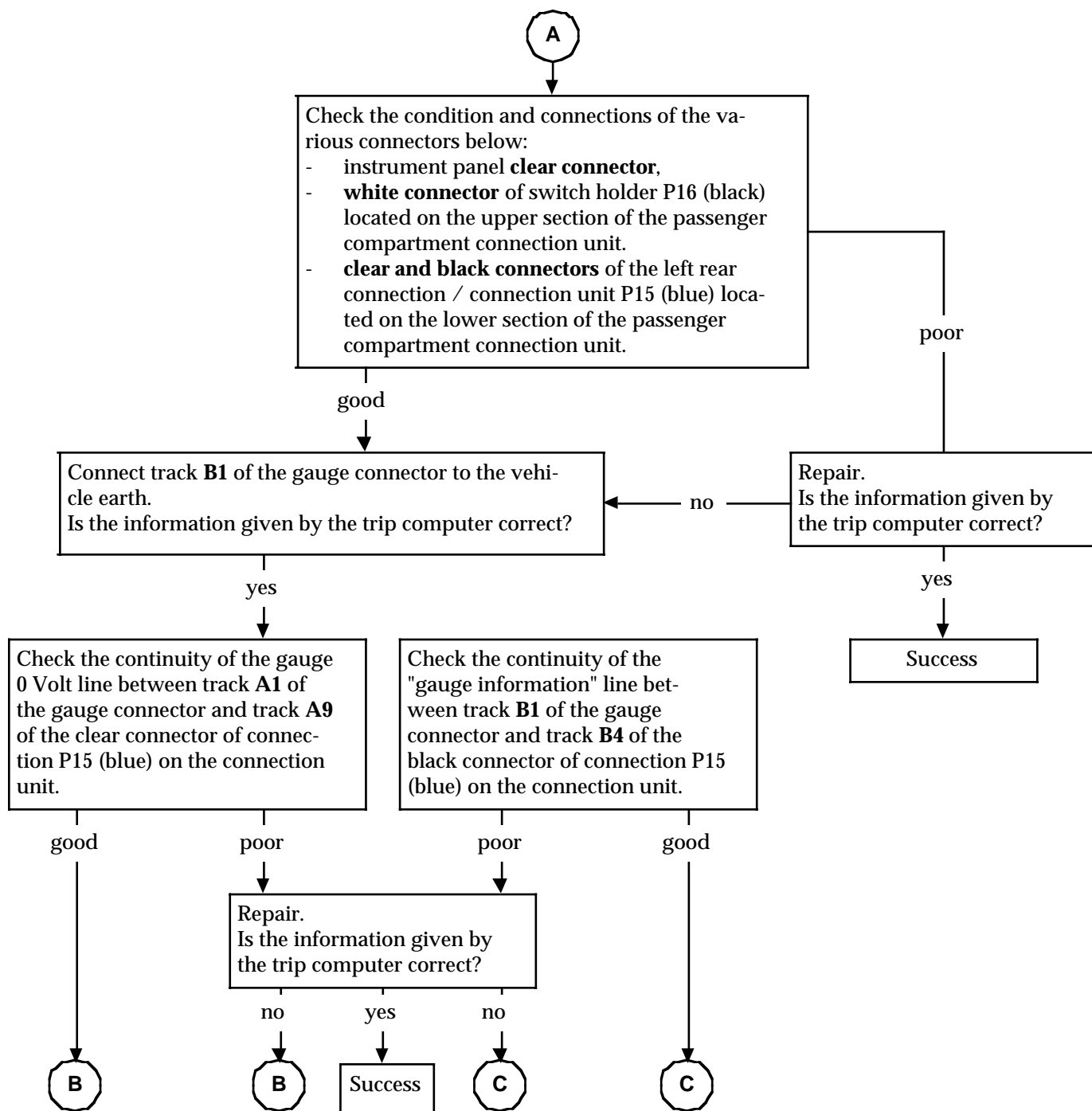
Success

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

Conventional instrument panel with trip computer

FAULT FINDING CHARTS

CHART 1
CONT 1



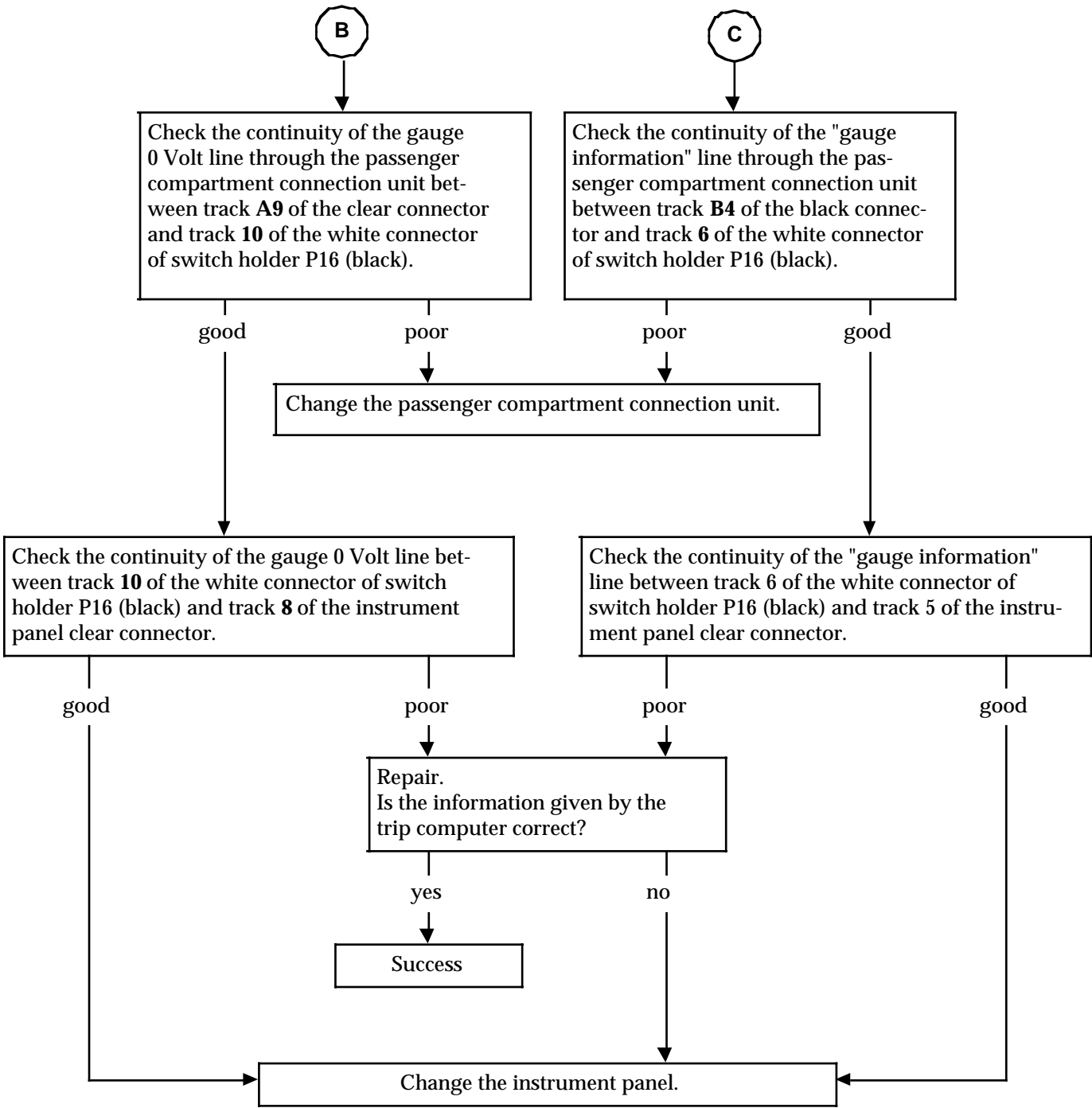
**AFTER
REPAIR**

Adjust the various instrument panel functions (clock, etc...) if necessary. Check that all the instrument panel functions operate correctly.

Conventional instrument panel with trip computer

FAULT FINDING CHARTS

CHART 1 CONT 2	
---------------------------------	--



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

Conventional instrument panel with trip computer

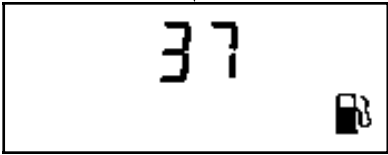
FAULT FINDING CHARTS

CHART 2	FLASHING DASHES SOMETIMES DISPLAYED IN PLACE OF RANGE
NOTES	Instrument panel fault finding procedures are carried out with the ignition on. Change to fault finding sequence: - keep the zero reset / reset / trip computer advance button at the end of the windscreen wiper stalk pressed and switch on the ignition.

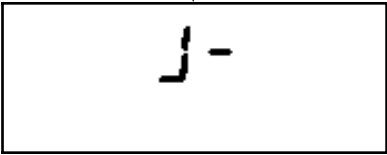
FLASHING DASHES SOMETIMES DISPLAYED IN PLACE OF RANGE

Change to fault finding sequence { keep the zero reset / reset / trip computer advance button at the end of the windscreen wiper stalk pressed and switch on the ignition.

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



and



The value displayed (quantity of fuel remaining) should be the conversion of gauge resistance R.

If $280\ \Omega < R < 352\ \Omega$ (reserve), 5 is displayed and the warning light is illuminated.

Gauge failure detection.

Intermittent failure.
Gauge information fault for more than 100 consecutive seconds.

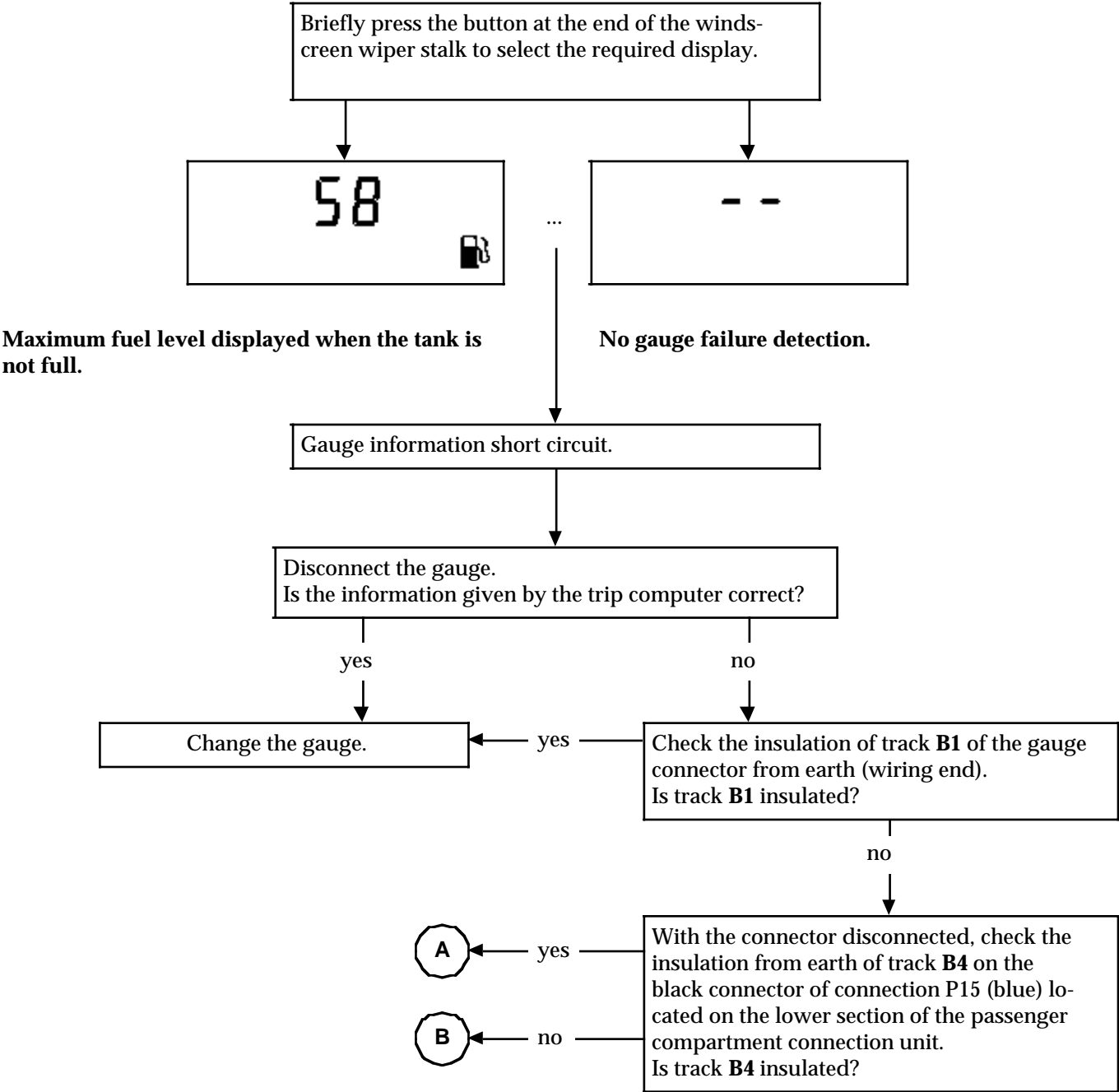
Follow the procedure described above in CHART 1.

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

FAULT FINDING CHARTS

CHART 3	INCORRECT RANGE DISPLAY
---------	-------------------------

NOTES	Instrument panel fault finding procedures are carried out with the ignition on. Change to fault finding sequence: - keep the zero reset / reset / trip computer advance button at the end of the windscreen wiper stalk pressed and switch on the ignition.
-------	---



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

FAULT FINDING CHARTS

CHART 3 CONT	
-----------------	--



Disconnect the connector.
On the connection unit, check the insulation from earth of **track 6** of the white connector of switch holder connector **P16** (black) located on the upper section.
Is **track 6** insulated?



Change the passenger compartment connection unit.

With white connector P16 on the connection unit and the instrument panel clear connector disconnected, check the insulation from earth of **track 5** on the instrument panel clear connector.
Is **track 5** insulated?



Repair the wiring between the instrument panel connector and the passenger compartment connection unit connector.

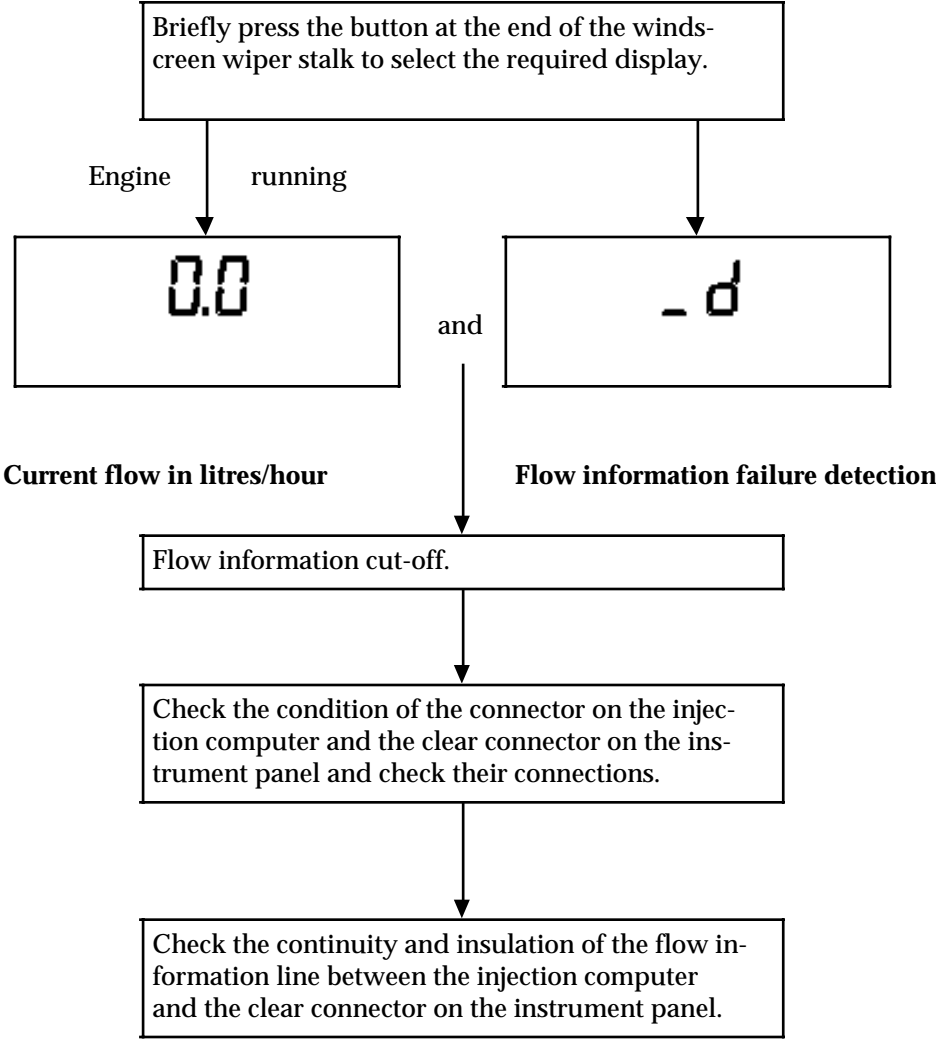


Repair the wiring between the gauge connector and the passenger compartment connection unit connector.

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

FAULT FINDING CHARTS

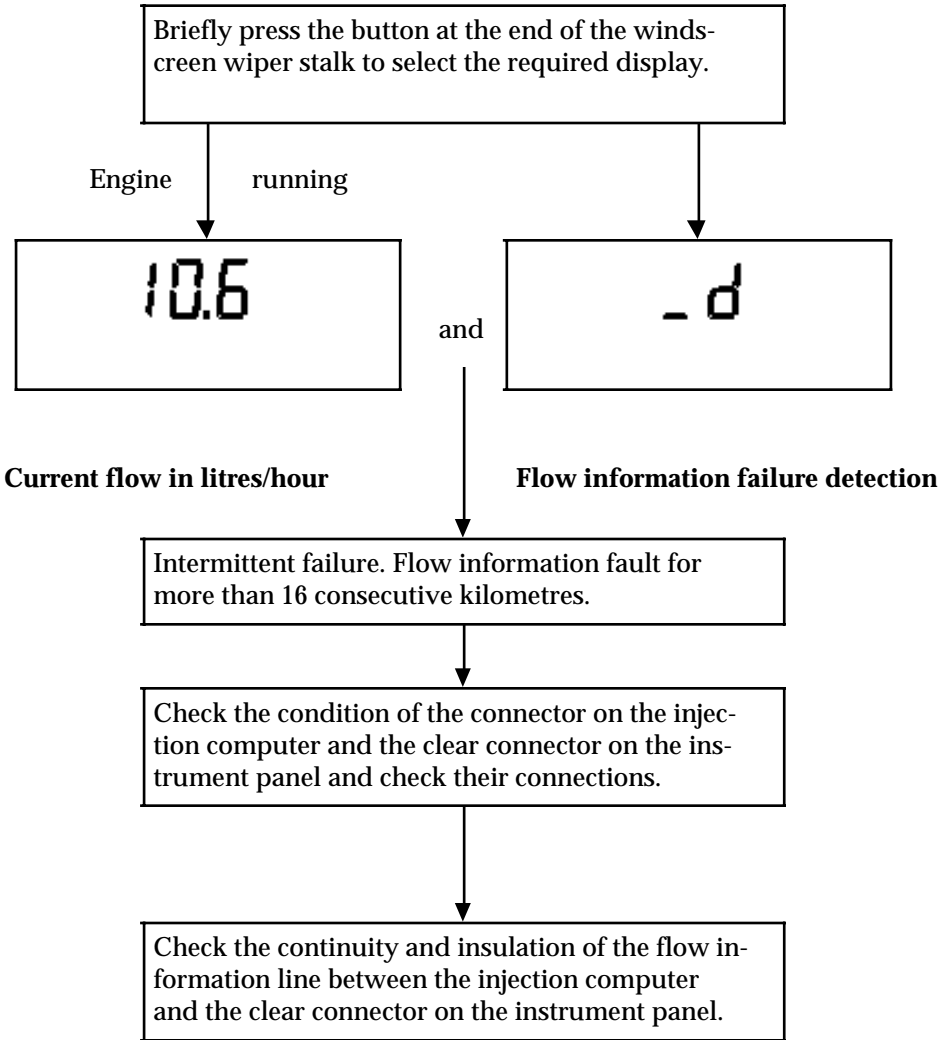
CHART 4	SEVERAL FUNCTIONS REPLACED BY FLASHING DASHES (except diesel)	
NOTES	Instrument panel fault finding procedures are carried out with the ignition on. Change to fault finding sequence: - keep the zero reset / reset / trip computer advance button at the end of the windscreen wiper stalk pressed and switch on the ignition.	
1st EXAMPLE	NOTES	None



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

FAULT FINDING CHARTS

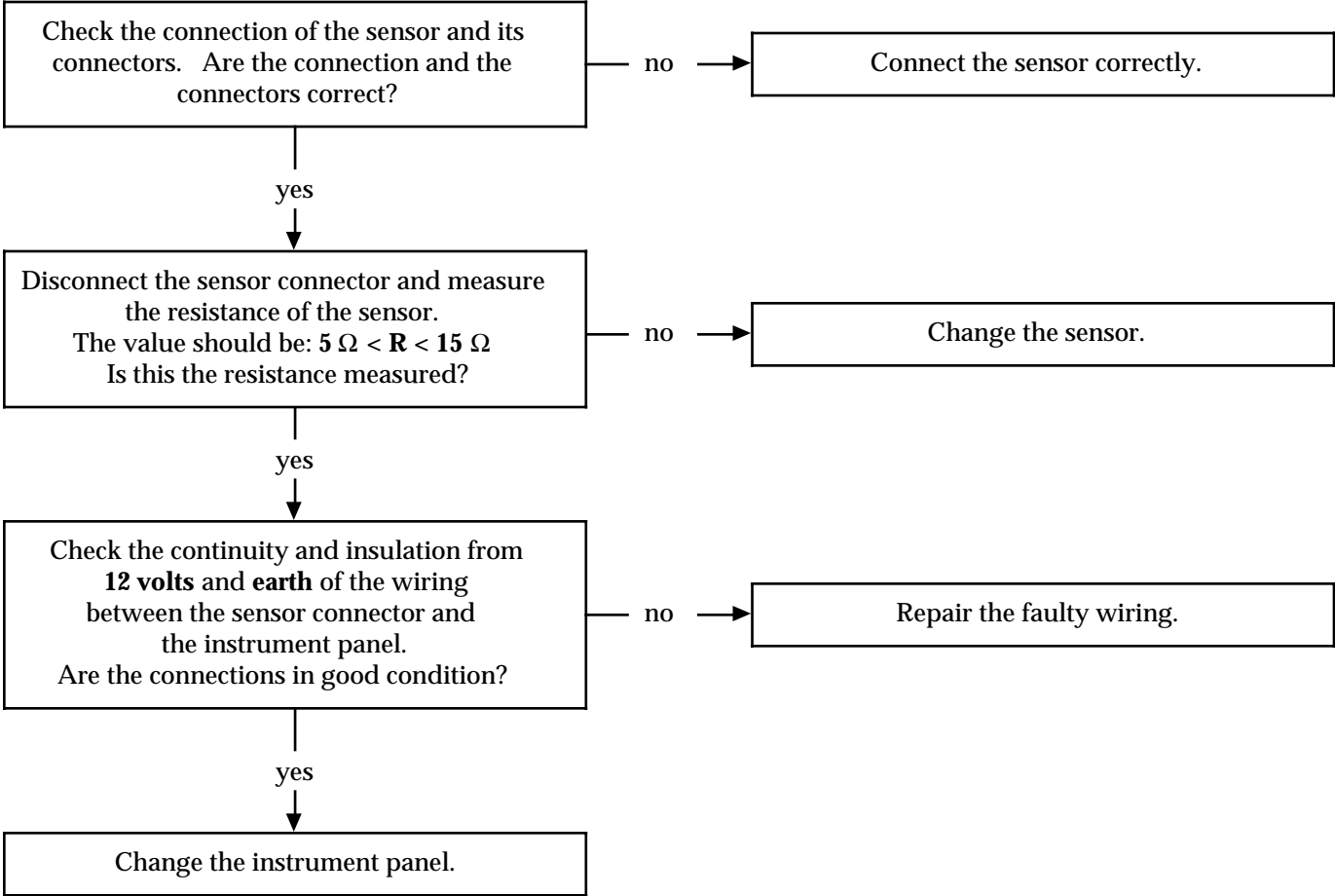
CHART 4 CONT		
2nd EXAMPLE	NOTES	None



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

FAULT FINDING CHARTS

CHART 5	OIL LEVEL DISPLAY INCORRECT BUT TOTAL DISTANCE DISPLAYED
NOTES	Instrument panel fault finding procedures are carried out with the ignition on. Change to fault finding sequence: - keep the zero reset / reset / trip computer advance button at the end of the windscreen wiper stalk pressed and switch on the ignition.

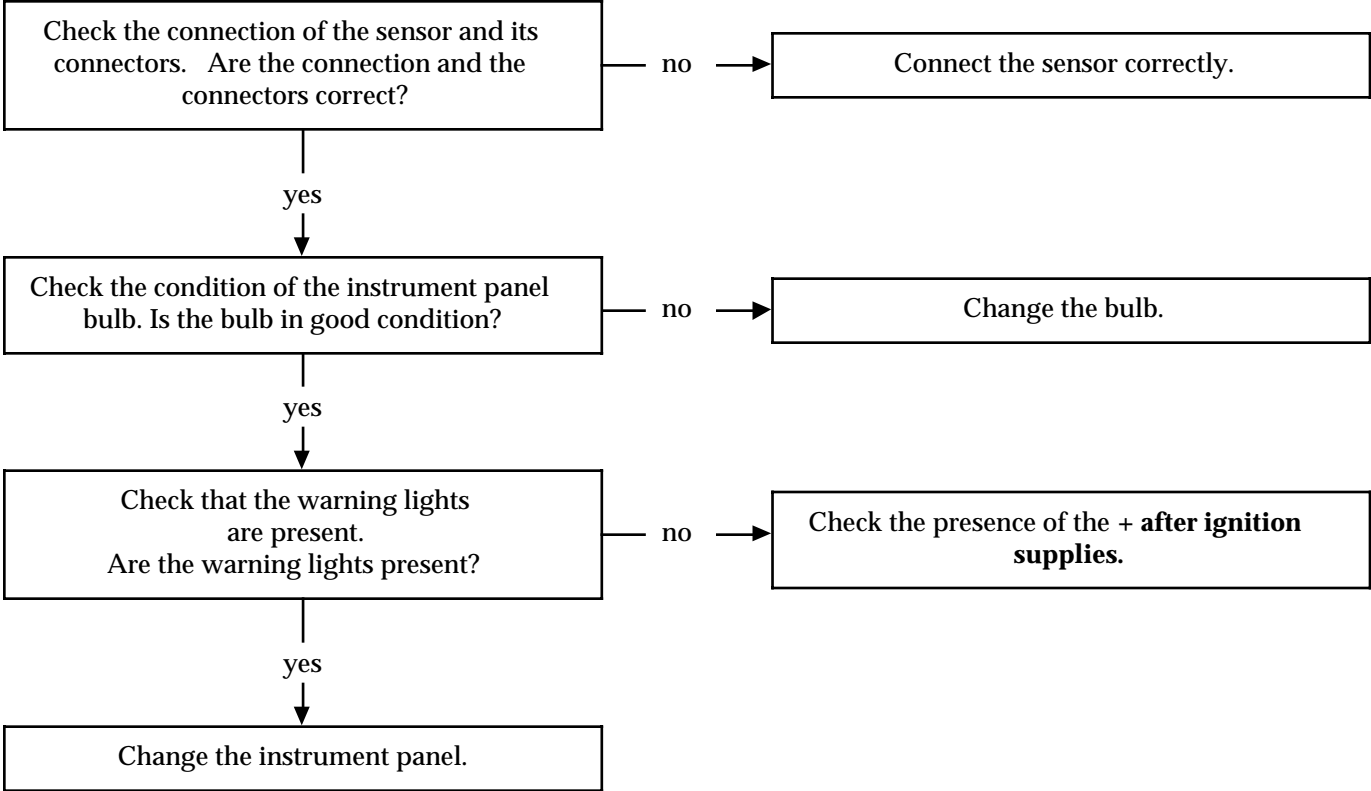


AFTER REPAIR	Adjust the various instrument panel functions (clock, etc...) if necessary. Check that all the instrument panel functions operate correctly.
--------------	---

FAULT FINDING CHARTS

CHART 6	NEITHER OIL LEVEL NOR TOTAL DISTANCE DISPLAYED
---------	--

NOTES	Instrument panel fault finding procedures are carried out with the ignition on. Change to fault finding sequence: - keep the zero reset / reset / trip computer advance button at the end of the windscreen wiper stalk pressed and switch on the ignition.
-------	---



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

Conventional instrument panel with trip computer

FAULT FINDING - CUSTOMER COMPLAINTS

NOTES

Refer to the "Fault finding - Introduction" section starting the fault finding procedure.

SAFRANE EXCEPT GB VERSION

SPEEDOMETER DOES NOT OPERATE AND INCORRECT TRIP COMPUTER AND TOTAL DISTANCE RECORDER DISPLAYS	CHART 1
REV COUNTER DOES NOT OPERATE	CHART 2
FLASHING OF OIL DRAIN RANGE	CHART 3
FLASHING OF RANGE	CHART 4
INCORRECT DISPLAY OF RANGE WITH NO FLASHING OF DISPLAY	CHART 5
FLASHING OF SEVERAL FUNCTIONS NO CURRENT CONSUMPTION	CHART 6
INCORRECT OPERATION OF OIL PRESSURE LEVEL RECEIVER	CHART 7
INCORRECT OPERATION OF OIL PRESSURE LEVEL RECEIVER IN PRESSURE MODE (NEEDLE AT MAXIMUM, IGNITION ON)	CHART 8
For vehicles fitted with an automatic gearbox:	
NO MODE AND POSITION DISPLAY FAULT WARNING LIGHT ILLUMINATED OR FLASHING	CHART 9
NO DISPLAY (LEVER POSITION, PROGRAMME) FAULT WARNING LIGHT EXTINGUISHED	CHART 10
DIGITS PARTIALLY DISPLAYED	CHART 11
INCONSISTENCY BETWEEN SELECTOR POSITION AND INFORMATION DISPLAYED ON INSTRUMENT PANEL	CHART 12

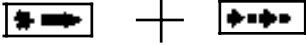
Conventional instrument panel with trip computer

CHART 1

**SPEEDOMETER DOES NOT OPERATE AND INCORRECT TRIP
COMPUTER AND TOTAL DISTANCE RECORDER DISPLAYS**

NOTES

Instrument panel fault finding procedures are carried out with the ignition on.

Change to fault finding sequence:  For more than **2 seconds**

Check the movement of the needle to **40 at 40 km/h**

GOOD

POOR

Check:

- connection of the sensor cable to the gearbox,
- correct connection of the connector on the sensor,
- + **after ignition** supply on **track A** and **earth** on **track C** on the sensor connector.

Change the instrument panel

POOR

Repair

GOOD

Check:

- the continuity and insulation of the wiring between the speed sensor and the instrument panel.

POOR

GOOD

Repair

POOR

Check that the instrument panel connector and its pins are in good condition.

GOOD

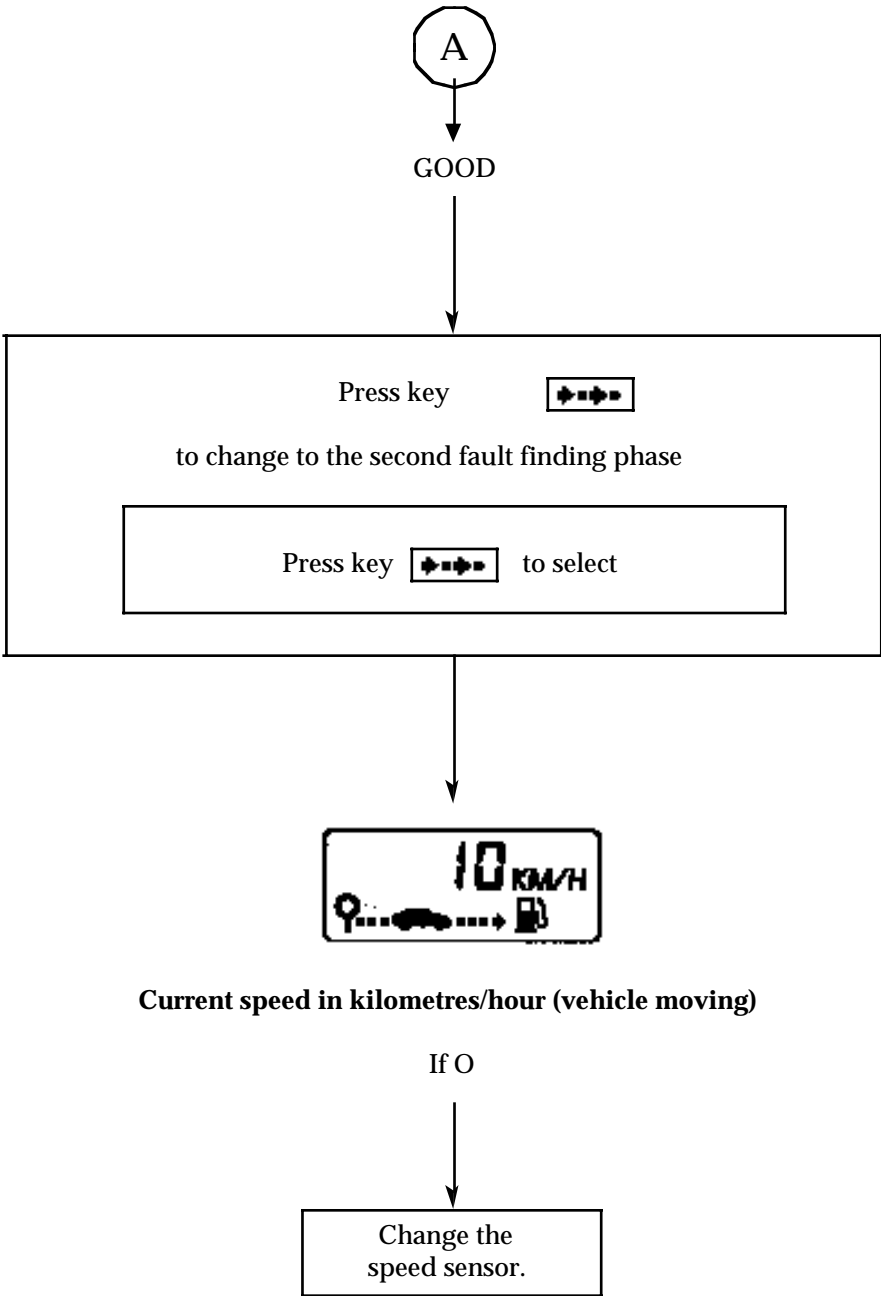


**AFTER
REPAIR**

Adjust the various instrument panel functions (clock, etc...) if necessary.
Check that all the instrument panel functions operate correctly.

FAULT FINDING CHARTS

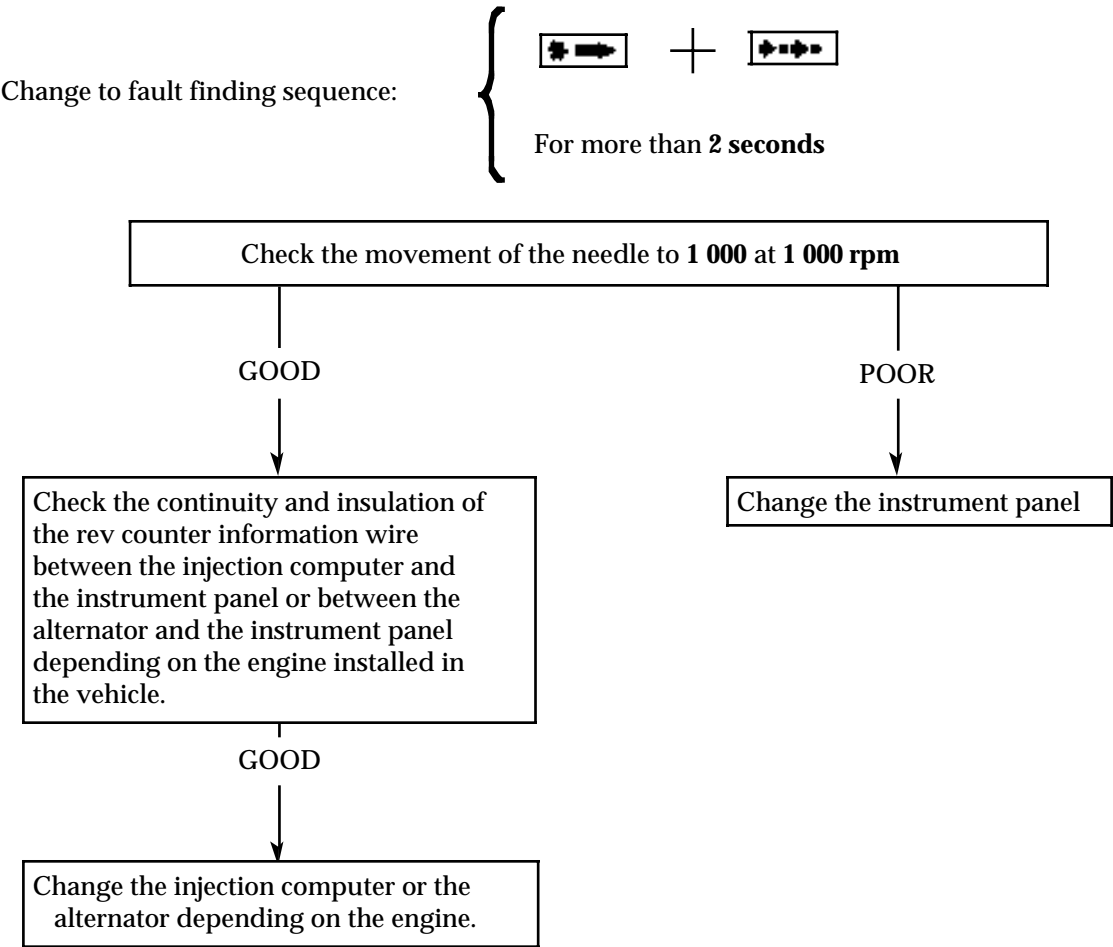
CHART 1 CONT	
-----------------	--



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

FAULT FINDING CHARTS

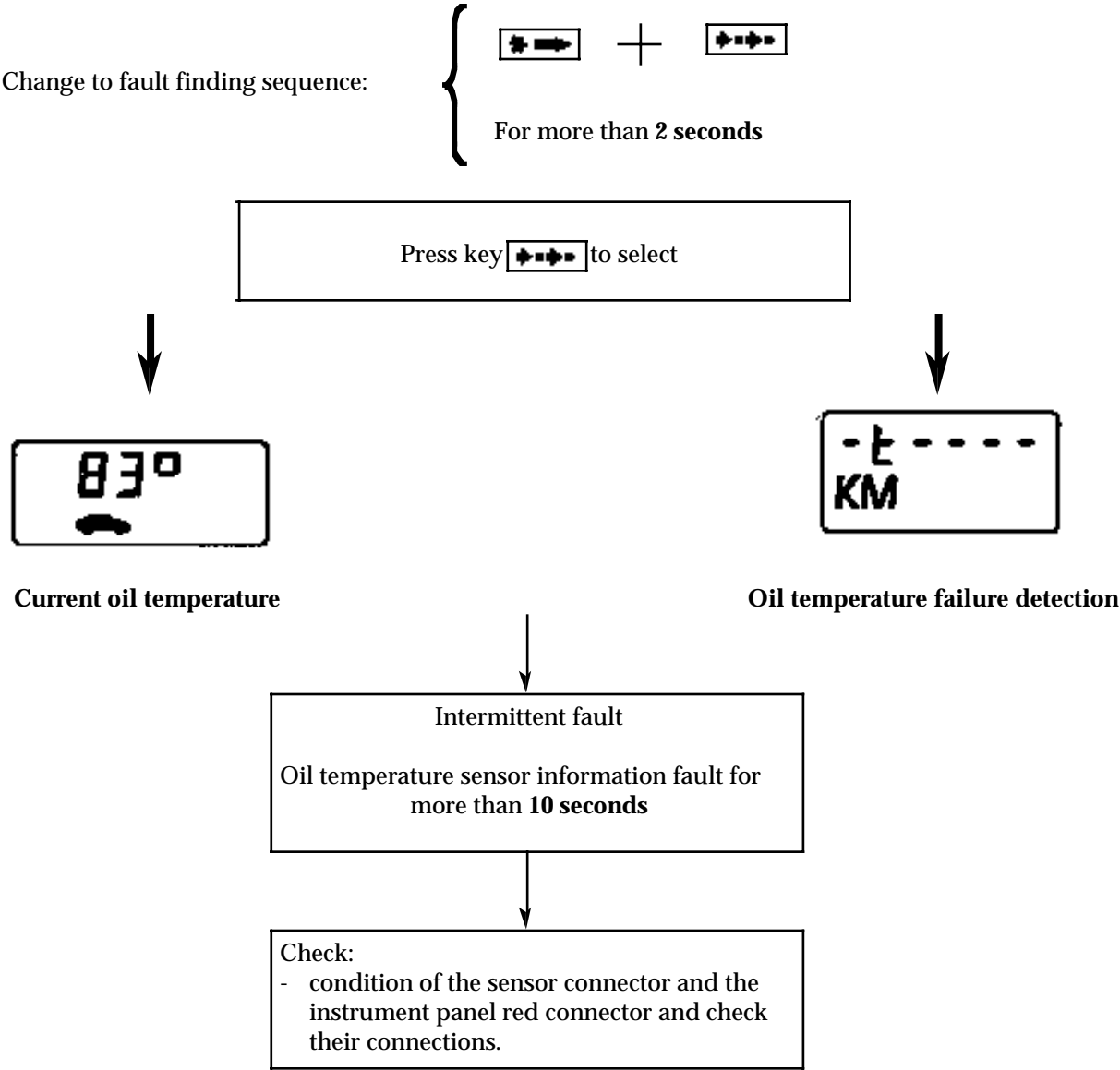
CHART 2	REV COUNTER DOES NOT OPERATE
NOTES	Instrument panel fault finding procedures are carried out with the ignition on. Check the condition of the engine earth.



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

FAULT FINDING CHARTS

CHART 3	FLASHING OF THE OIL DRAIN RANGE	
NOTES	Instrument panel fault finding procedures are carried out with the ignition on.	
1st EXAMPLE	NOTES	None



FAULT FINDING CHARTS

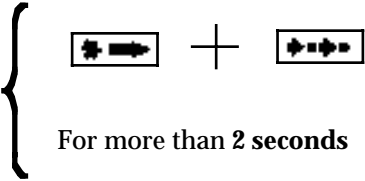
CHART 3
CONT 1

2nd EXAMPLE

NOTES

None

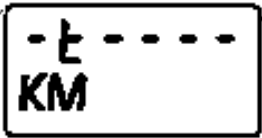
Change to fault finding sequence:



Press key  to select



Current oil temperature



Oil temperature failure detection

Oil temperature sensor information cut-off
(minimum 10 seconds)

Check:

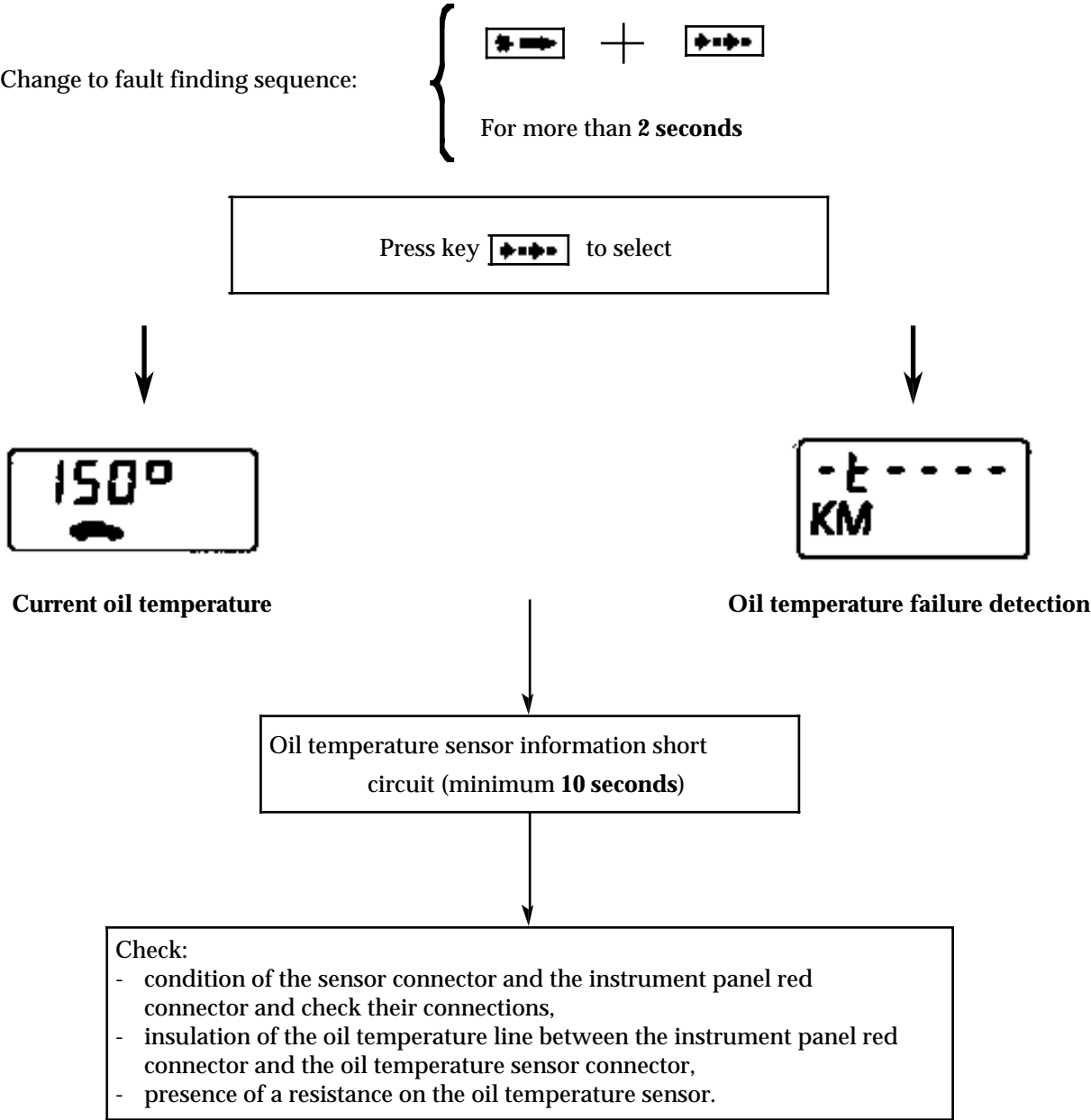
- condition of the sensor connector and the instrument panel red connector and check their connections,
- continuity of the oil temperature lines between the oil temperature sensor connector and the instrument panel red connector.
- continuity of the oil temperature sensor.

AFTER
REPAIR

Adjust the various instrument panel functions (clock, etc...) if necessary.
Check that all the instrument panel functions operate correctly.

FAULT FINDING CHARTS

CHART 3 CONT 2		
3rd EXAMPLE	NOTES	None



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

FAULT FINDING CHARTS

CHART 4	FLASHING OF RANGE	
NOTES	Instrument panel fault finding procedures are carried out with the ignition on.	
1st EXAMPLE	NOTES	None

Change to fault finding sequence:

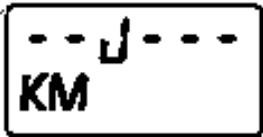
+

For more than 2 seconds

Press key  to select



The value displayed (quantity of fuel remaining) should be the conversion of the gauge resistance.
If the display is less than or equal to 5 litres the fuel low signal is transmitted.



Gauge failure detection

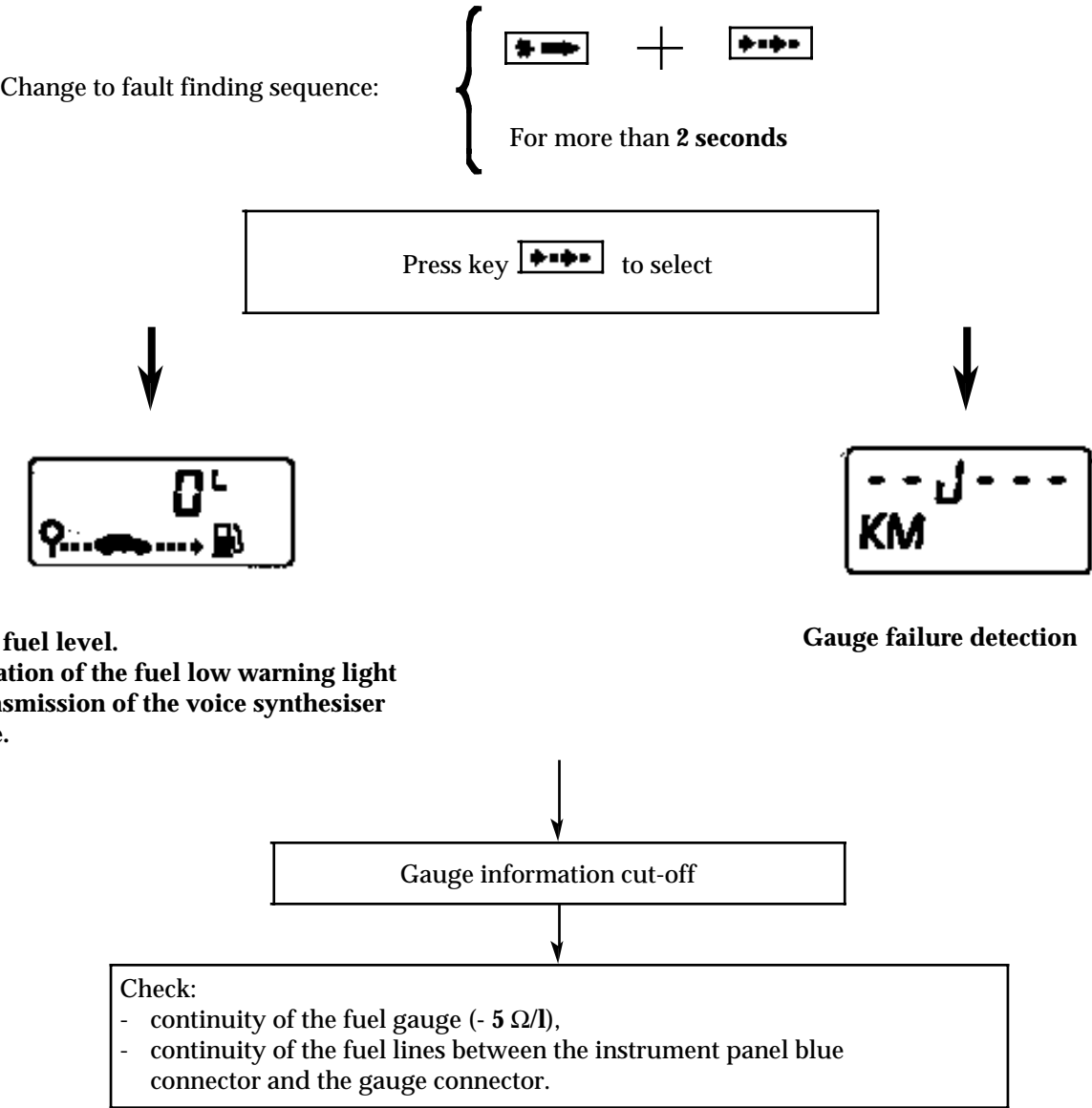
Intermittent fault
Gauge information fault for more than 100 seconds

- Check:
- condition of the fuel gauge connector and the instrument panel blue connector and check their connections,
 - continuity of the fuel gauge throughout its range of operation (- 5 Ω/I).

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

FAULT FINDING CHARTS

CHART 4 CONT		
2nd EXAMPLE	NOTES	None



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

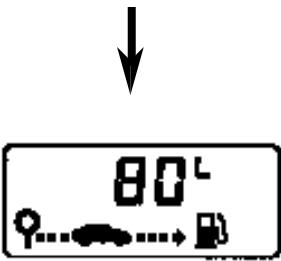
FAULT FINDING CHARTS

CHART 5	INCORRECT DISPLAY OF RANGE WITH NO FLASHING OF DISPLAY
NOTES	Instrument panel fault finding procedures are carried out with the ignition on.

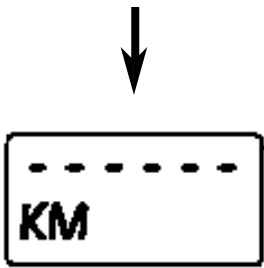
Change to fault finding sequence:

For more than 2 seconds

Press key to select



Maximum fuel level displayed when the tank is not full



No gauge failure detection

Gauge information short circuit

- Check:
- resistance of the fuel gauge (- 5 Ω /l),
 - insulation of the gauge line between the instrument panel blue connector and the gauge connector.

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

FAULT FINDING CHARTS

CHART 6	FLASHING OF SEVERAL FUNCTIONS NO CURRENT CONSUMPTION	
NOTES	Instrument panel fault finding procedures are carried out with the ignition on.	
1 st EXAMPLE	NOTES	None

Change to fault finding sequence:

For more than 2 seconds

Press key to select

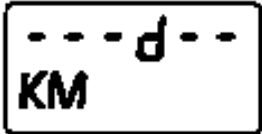
↓

Engine
running



Current flow in litres/hour

↓



Flow information failure detection

Intermittent failure
Flow information fault for more than 16 km.

Check the condition of the connector on the
injection computer and the instrument panel
connector and check their connections.

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

FAULT FINDING CHARTS

CHART 6 CONT		
2nd EXAMPLE	NOTES	None

Change to fault finding sequence:

+

For more than 2 seconds

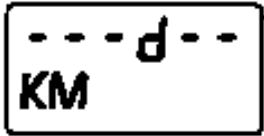
Press key  to select



Engine
running



Current flow in litres/hour



Flow information failure detection



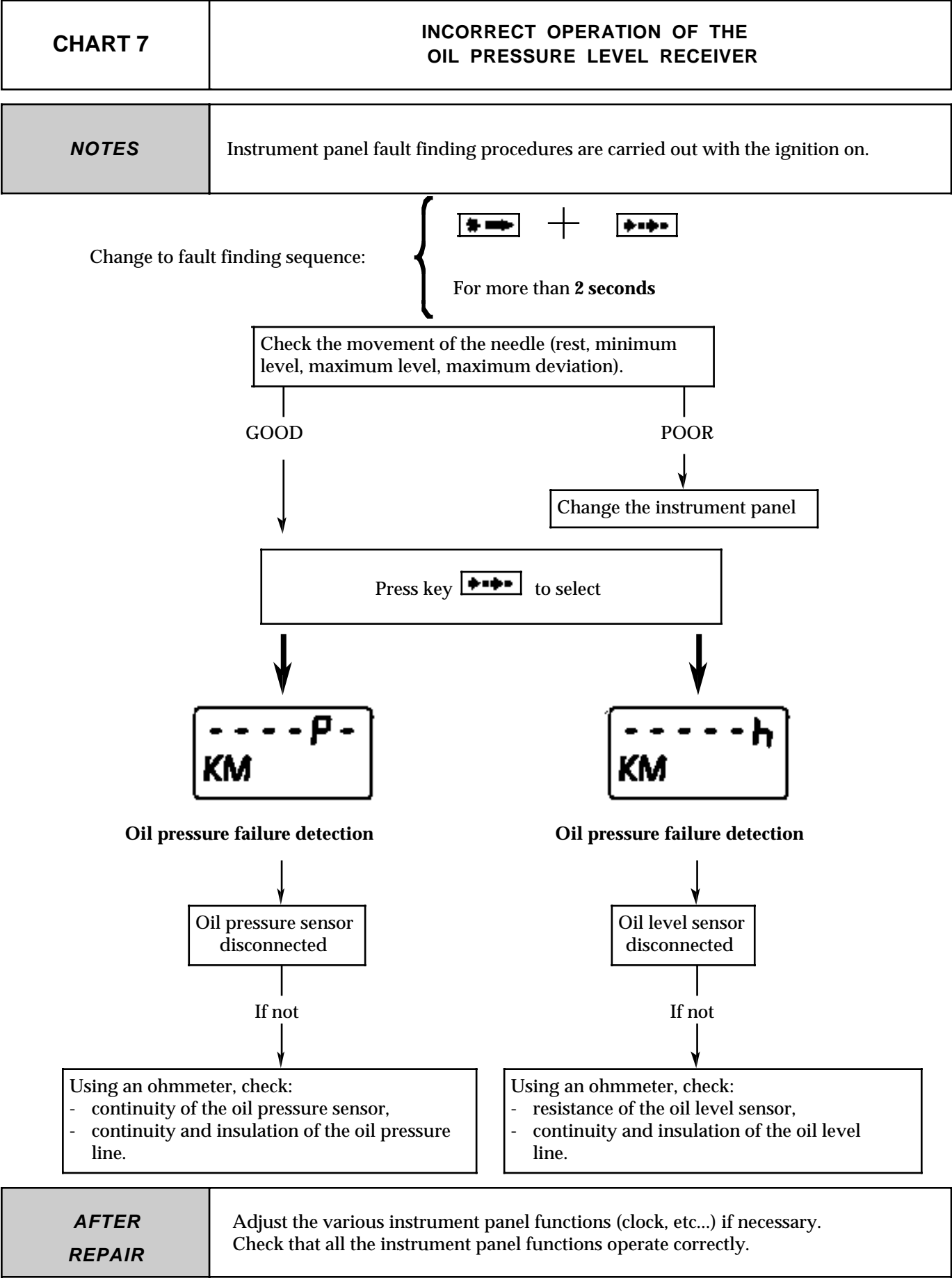
Flow information cut-off



Check the continuity and insulation of the flow information line between the injection computer and the instrument panel red connector.

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

FAULT FINDING CHARTS



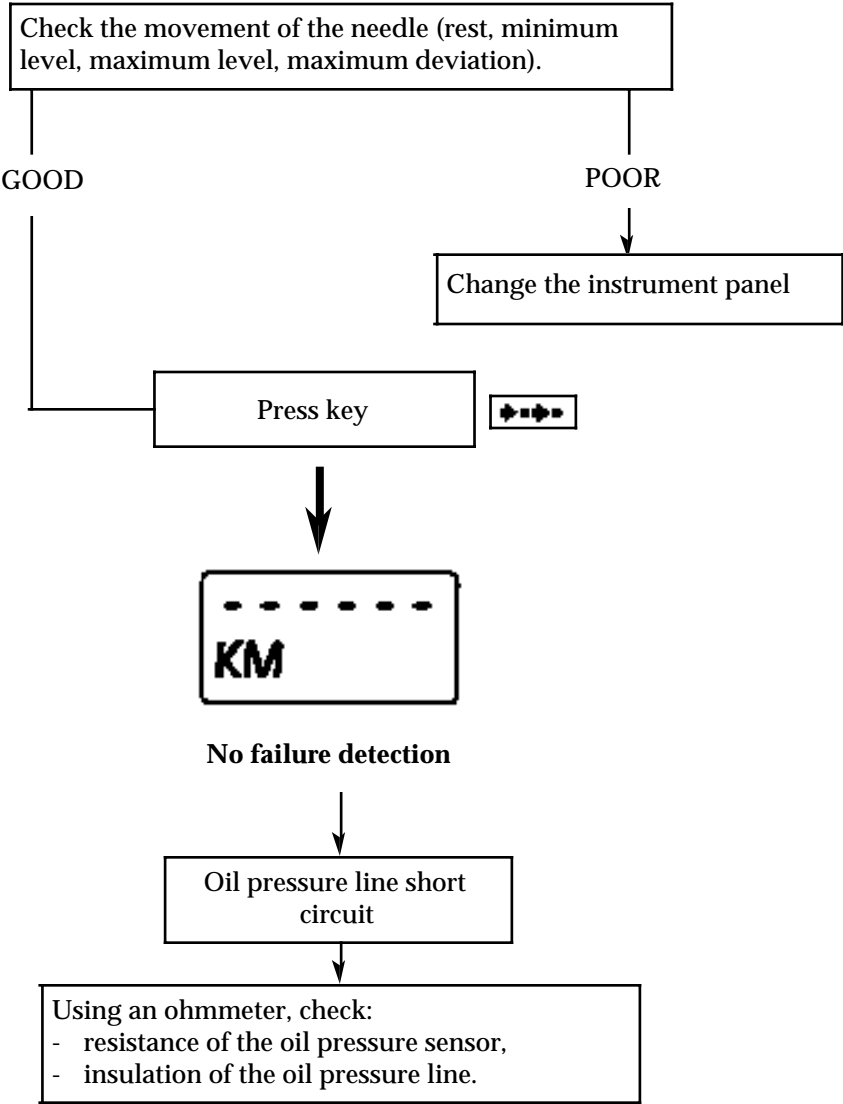
FAULT FINDING CHARTS

CHART 8	INCORRECT OPERATION OF OIL PRESSURE LEVEL RECEIVER IN PRESSURE MODE (NEEDLE AT MAXIMUM, IGNITION ON)
NOTES	Instrument panel fault finding procedures are carried out with the ignition on.

Change to fault finding sequence:

+

For more than 2 seconds



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

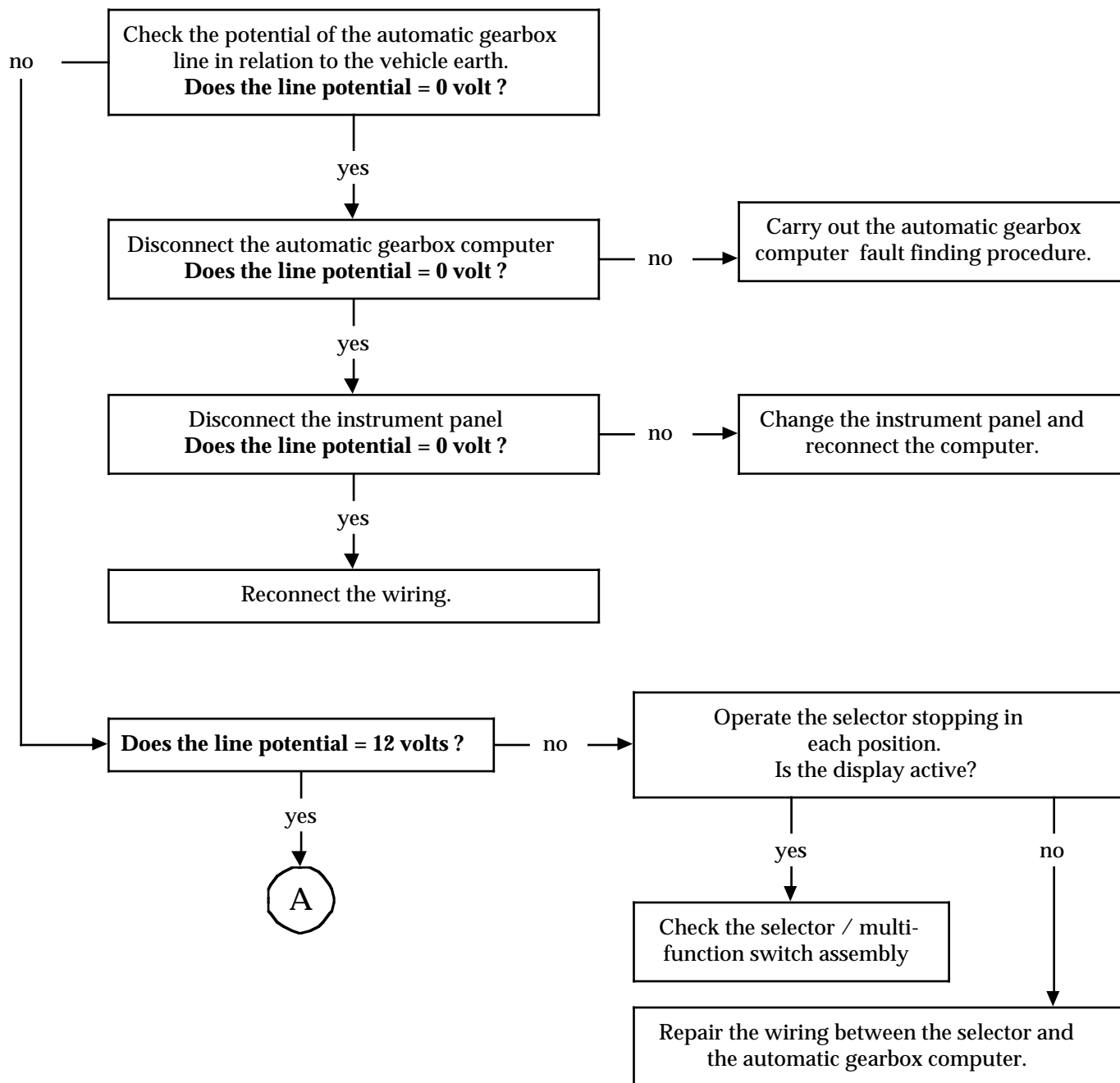
Conventional instrument panel with trip computer

FAULT FINDING CHARTS

CHART 9

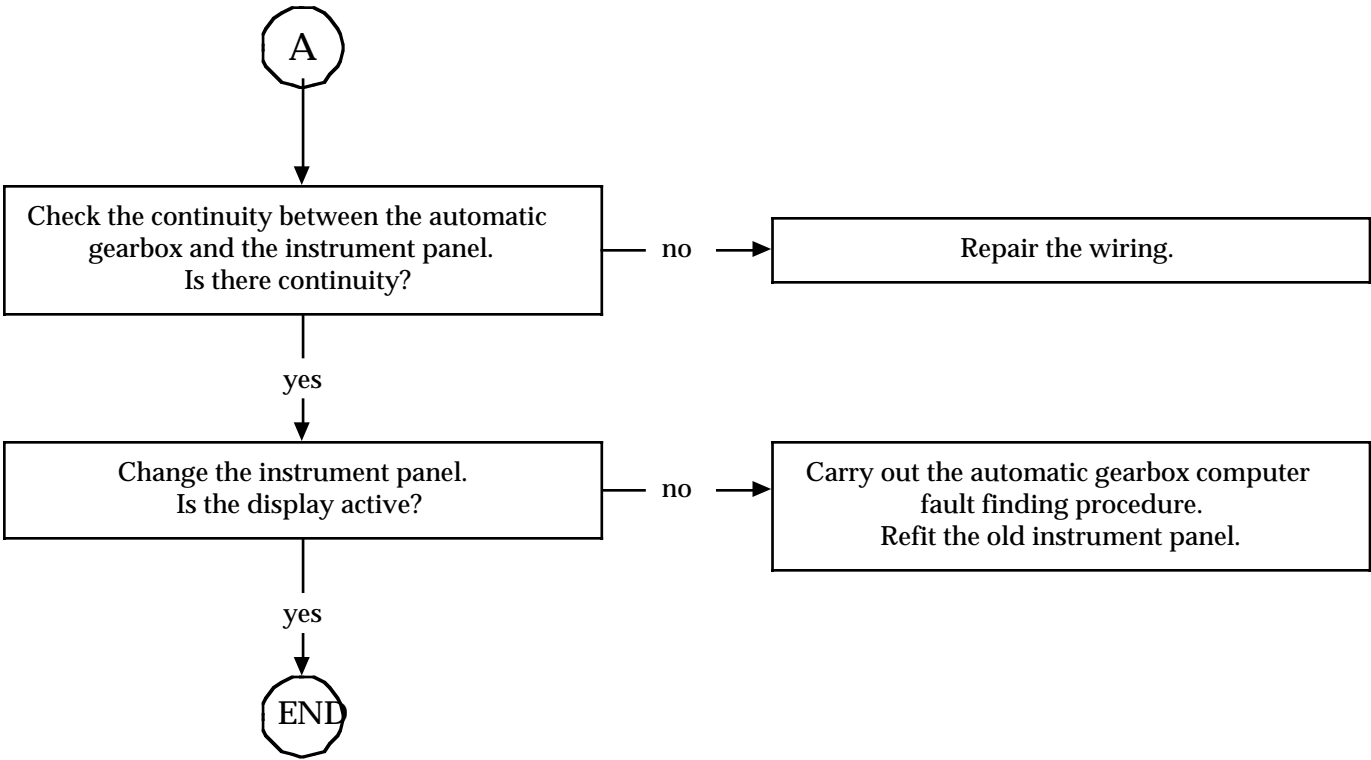
**NO MODE AND POSITION DISPLAY, FAULT WARNING LIGHT
ILLUMINATED OR FLASHING****NOTES**

Fault finding procedure for vehicles fitted with an automatic gearbox (BVA).

**AFTER
REPAIR**Adjust the various instrument panel functions (clock, etc...) if necessary.
Check that all the instrument panel functions operate correctly.

FAULT FINDING CHARTS

CHART 9
CONT



**AFTER
REPAIR**

Adjust the various instrument panel functions (clock, etc...) if necessary.
Check that all the instrument panel functions operate correctly.

Conventional instrument panel with trip computer

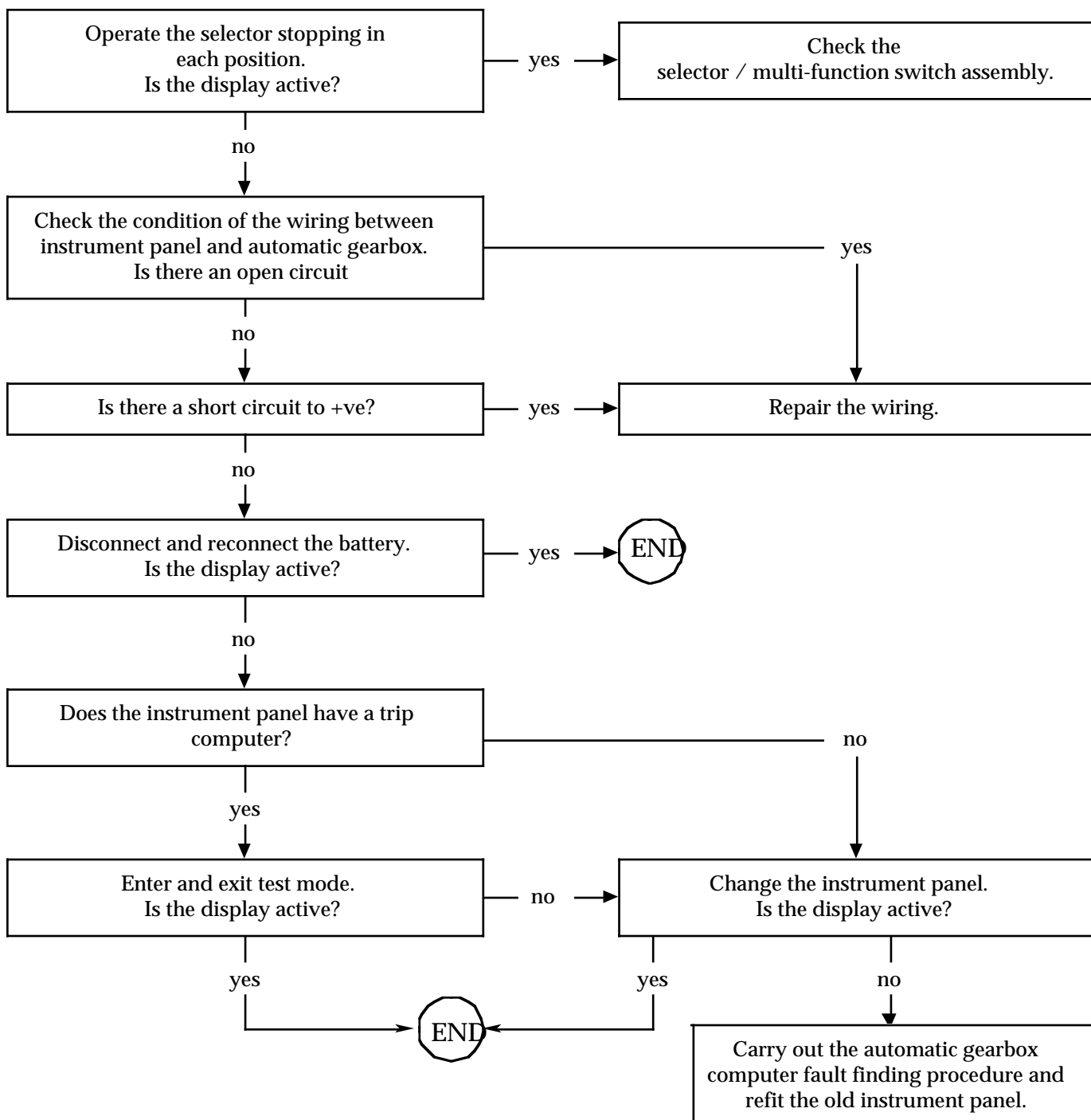
FAULT FINDING CHARTS

CHART 10

NO DISPLAY (LEVER POSITION, PROGRAMME)
FAULT WARNING LIGHT EXTINGUISHED

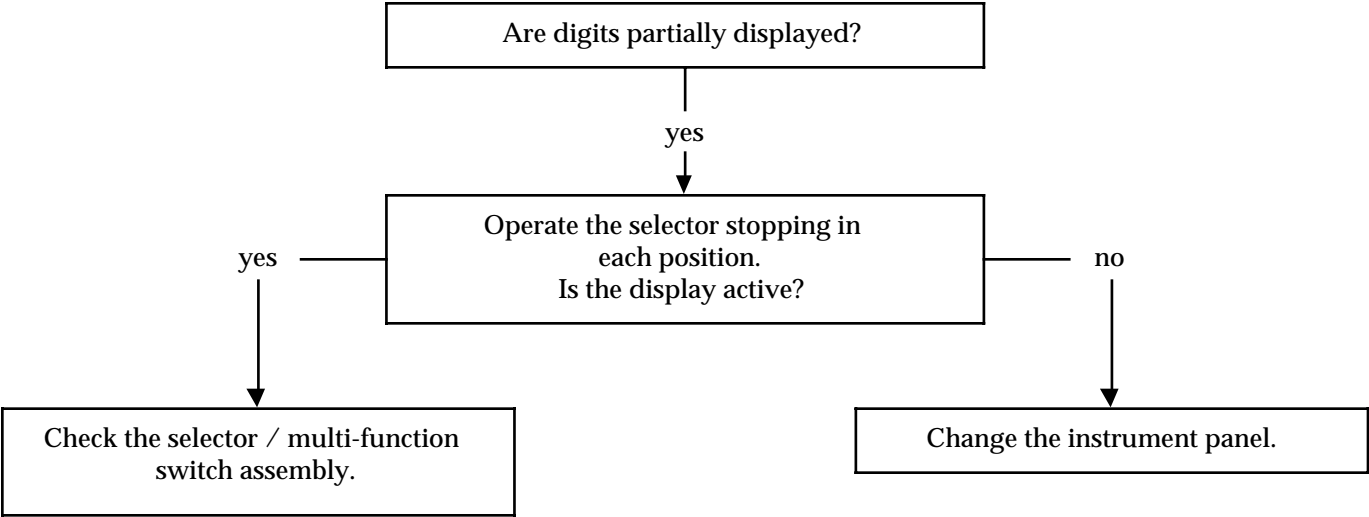
NOTES

Fault finding procedure for vehicles fitted with an automatic gearbox (BVA).

AFTER
REPAIRAdjust the various instrument panel functions (clock, etc...) if necessary.
Check that all the instrument panel functions operate correctly.

FAULT FINDING CHARTS

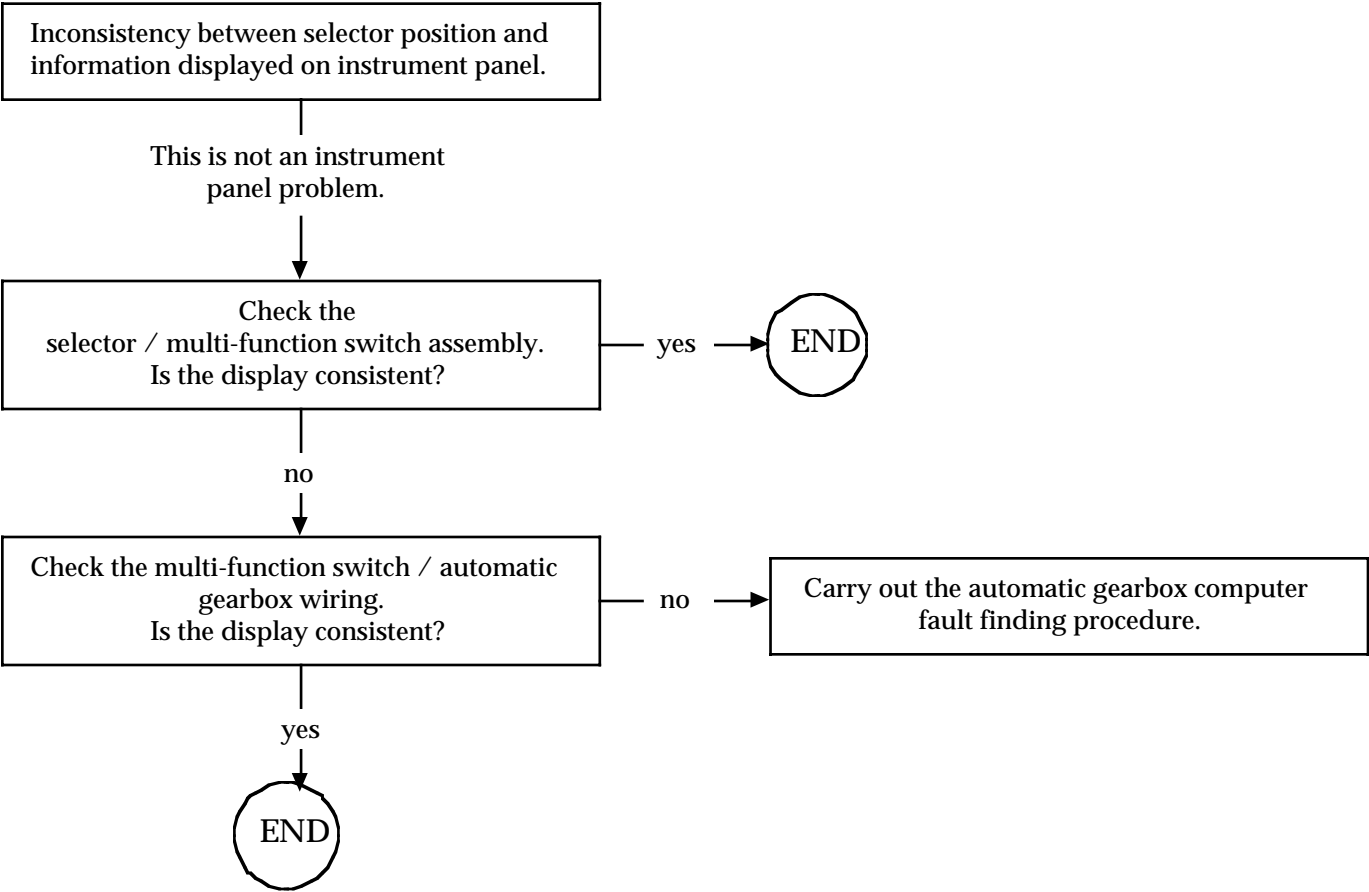
CHART 11	DIGITS PARTIALLY DISPLAYED
NOTES	Fault finding procedure for vehicles fitted with an automatic gearbox (BVA).



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

FAULT FINDING CHARTS

CHART 12	INCONSISTENCY BETWEEN SELECTOR POSITION AND INFORMATION DISPLAYED ON INSTRUMENT PANEL
NOTES	Fault finding procedure for vehicles fitted with an automatic gearbox (BVA).



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

Conventional instrument panel with trip computer

FAULT FINDING - CUSTOMER COMPLAINTS

NOTES

Refer to the "Fault finding - Introduction" section before beginning this fault finding procedure.

SAFRANE GB VERSION

SPEEDOMETER DOES NOT OPERATE AND INCORRECT TRIP COMPUTER AND TOTAL DISTANCE RECORDER DISPLAYS	CHART 1
REV COUNTER DOES NOT OPERATE	CHART 2
FLASHING OF OIL DRAIN RANGE	CHART 3
FLASHING OF RANGE	CHART 4
INCORRECT DISPLAY OF RANGE WITH NO FLASHING OF DISPLAY	CHART 5
FLASHING OF SEVERAL FUNCTIONS	CHART 6
INCORRECT OPERATION OF OIL PRESSURE LEVEL RECEIVER	CHART 7
INCORRECT OPERATION OF OIL PRESSURE LEVEL RECEIVER IN PRESSURE MODE (NEEDLE AT MAXIMUM, IGNITION ON)	CHART 8
For vehicles fitted with an automatic gearbox:	
NO MODE AND POSITION DISPLAY FAULT WARNING LIGHT ILLUMINATED OR FLASHING	CHART 9
NO DISPLAY (LEVER POSITION, PROGRAMME) FAULT WARNING LIGHT EXTINGUISHED	CHART 10
DIGITS PARTIALLY DISPLAYED	CHART 11
INCONSISTENCY BETWEEN SELECTOR POSITION AND INFORMATION DISPLAYED ON INSTRUMENT PANEL	CHART 12

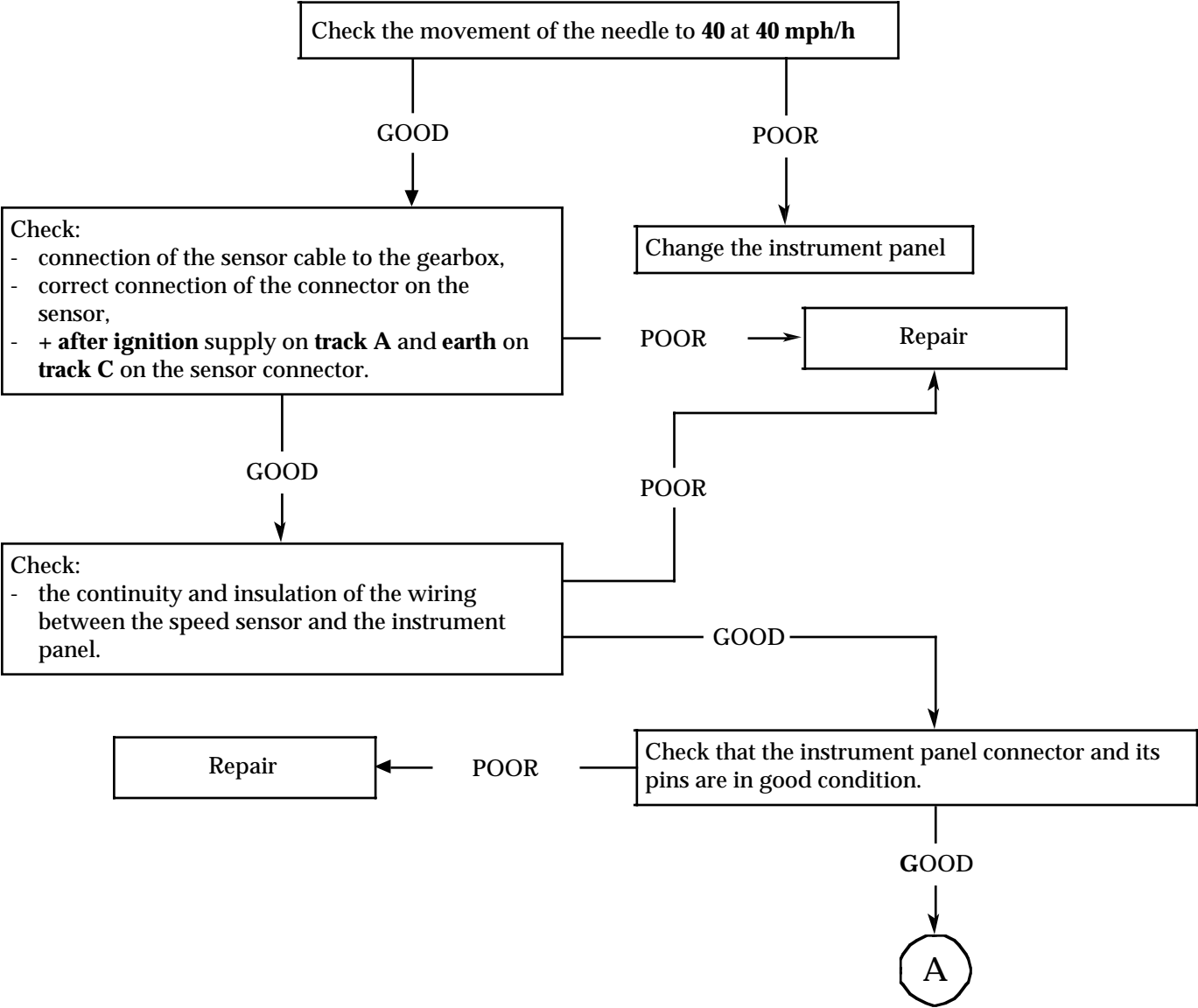
FAULT FINDING CHARTS

CHART 1	SPEEDOMETER DOES NOT OPERATE AND INCORRECT TRIP COMPUTER AND TOTAL DISTANCE RECORDER DISPLAYS
NOTES	Instrument panel fault finding procedures are carried out with the ignition on.

Change to fault finding sequence:

+

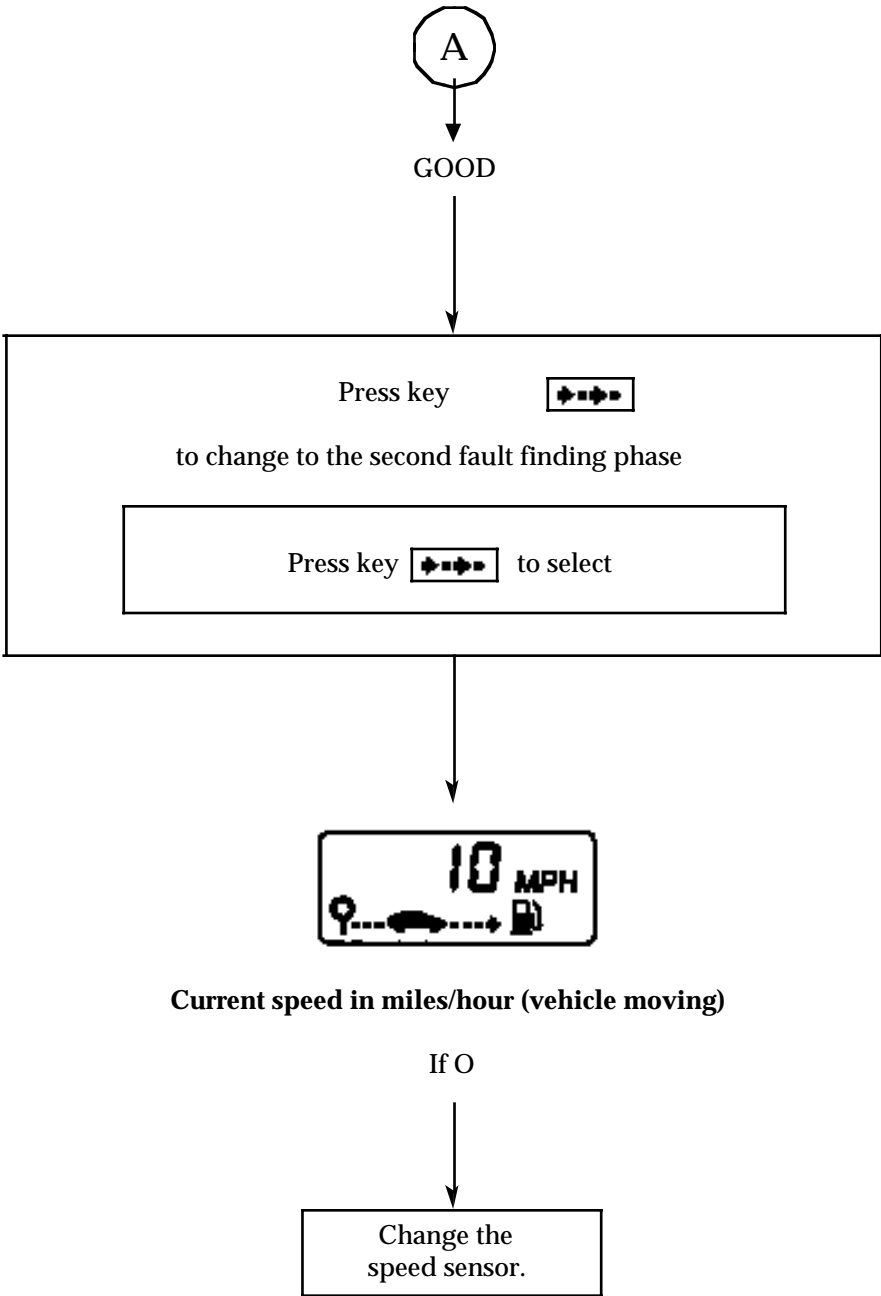
For more than 2 seconds



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

FAULT FINDING CHARTS

CHART 1
CONT

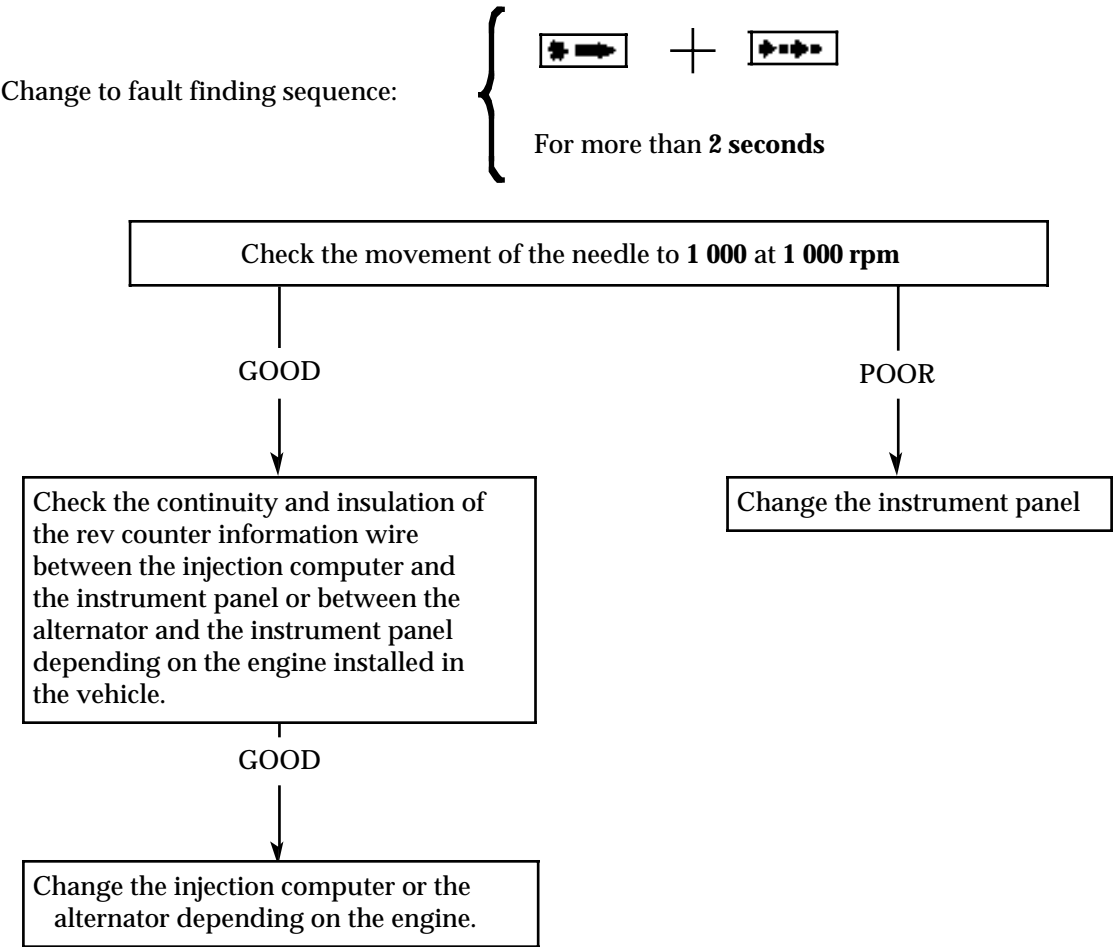


**AFTER
REPAIR**

Adjust the various instrument panel functions (clock, etc...) if necessary.
Check that all the instrument panel functions operate correctly.

FAULT FINDING CHARTS

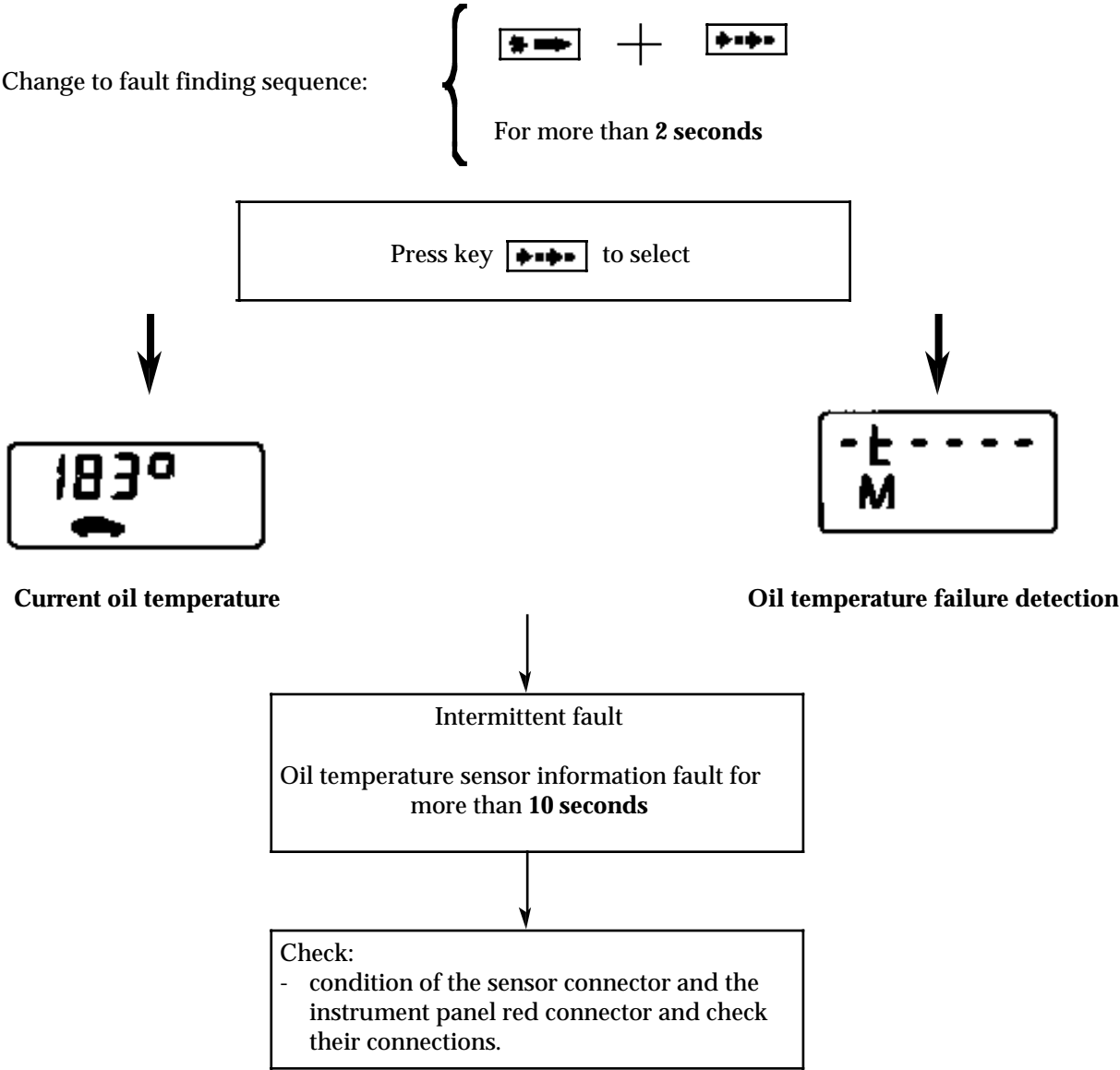
CHART 2	REV COUNTER DOES NOT OPERATE
NOTES	Instrument panel fault finding procedures are carried out with the ignition on. Check the condition of the engine earth.



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

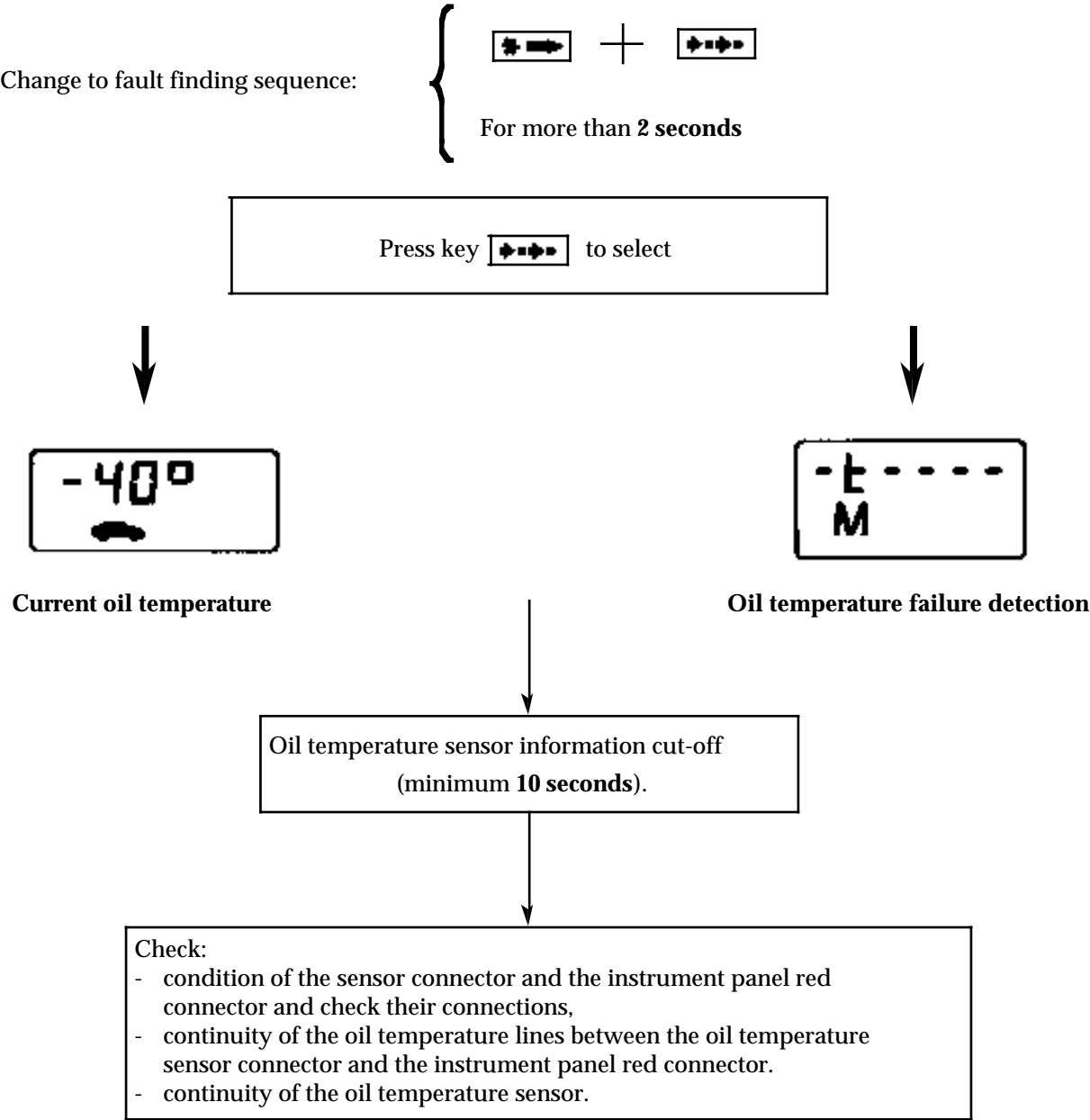
FAULT FINDING CHARTS

CHART 3	FLASHING OF THE OIL DRAIN RANGE	
NOTES	Instrument panel fault finding procedures are carried out with the ignition on.	
1st EXAMPLE	NOTES	None



FAULT FINDING CHARTS

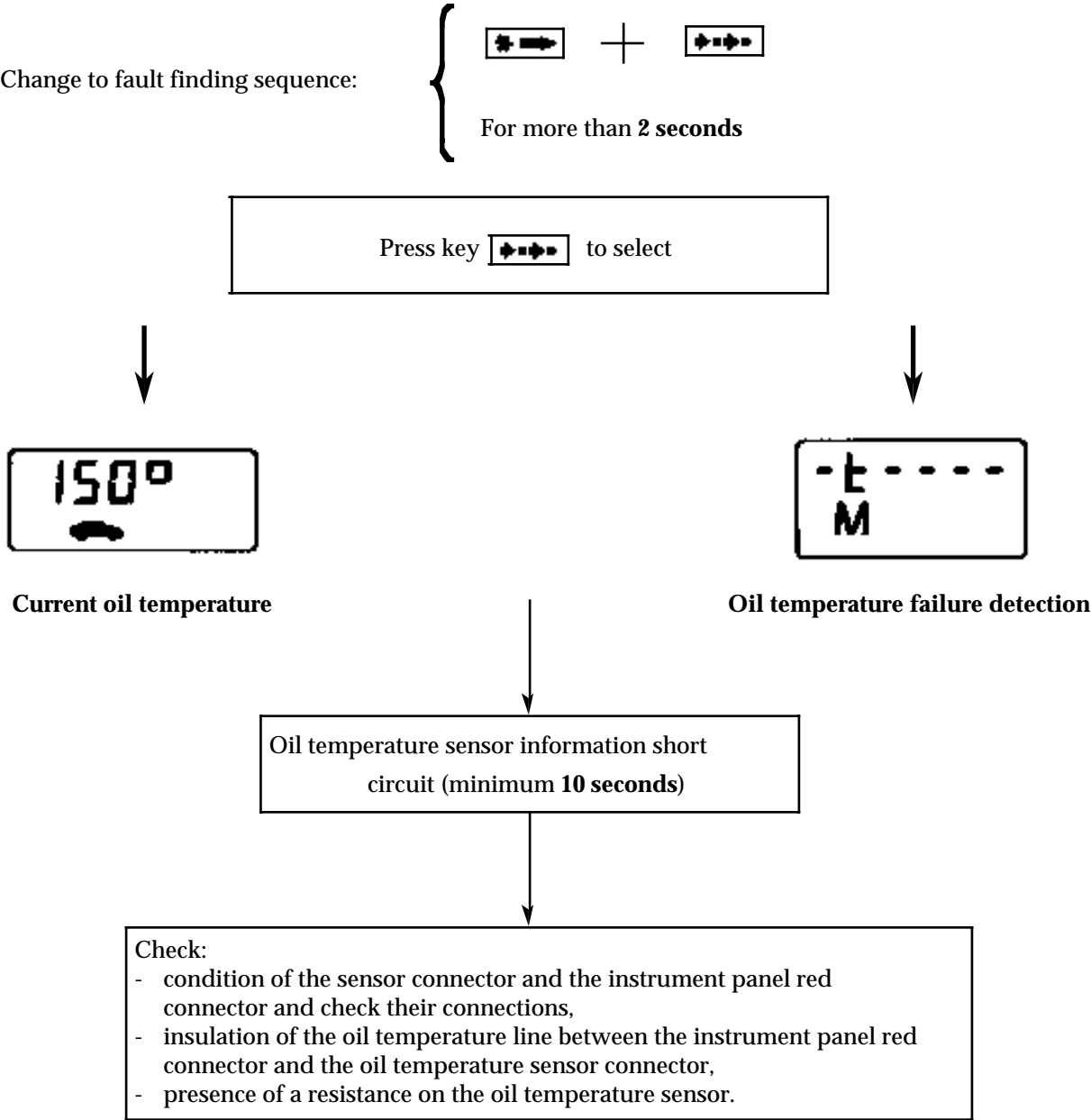
CHART 3 CONT 1		
2nd EXAMPLE	NOTES	None



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

FAULT FINDING CHARTS

CHART 3 CONT 2		
3rd EXAMPLE	NOTES	None



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

FAULT FINDING CHARTS

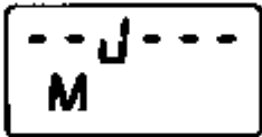
CHART 4	FLASHING OF RANGE	
NOTES		
1st EXAMPLE	NOTES	None

Change to fault finding sequence:

+

For more than 2 seconds

Press key  to select



The value displayed (quantity of fuel remaining) should be the conversion of the gauge resistance.
If the display is less than or equal to 1.1 gallons the fuel low signal is transmitted.

Gauge failure detection

Intermittent fault
Gauge information fault for more than 100 seconds

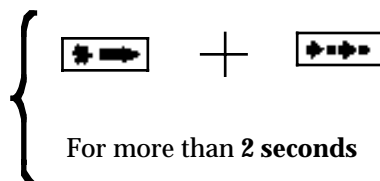
- Check:
- condition of the fuel gauge connector and the instrument panel blue connector and check their connections,
 - continuity of the fuel gauge throughout its range of operation (- 5 Ω/I).

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

FAULT FINDING CHARTS

CHART 4 CONT			
2 nd EXAMPLE	NOTES	None	

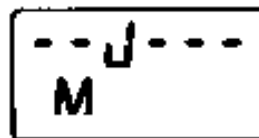
Change to fault finding sequence:



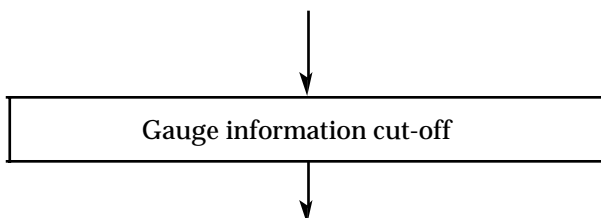
Press key ⬅➡ to select



**Current fuel level.
Illumination of the fuel low warning light
and transmission of the voice synthesiser
message.**



Gauge failure detection



Check:


- continuity of the fuel gauge (- **22.5 Ω /G**),
- continuity of the fuel lines between the instrument panel blue connector and the gauge connector.

<i>AFTER REPAIR</i>	Adjust the various instrument panel functions (clock, etc...) if necessary. Check that all the instrument panel functions operate correctly.
--------------------------------	---


FAULT FINDING CHARTS

CHART 5	INCORRECT RANGE DISPLAY WITH NO FLASHING OF DISPLAY
NOTES	Instrument panel fault finding procedures are carried out with the ignition on.

Change to fault finding sequence:

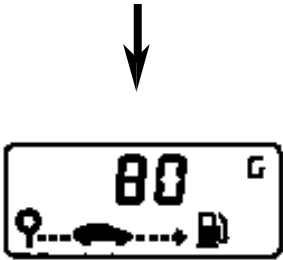


+

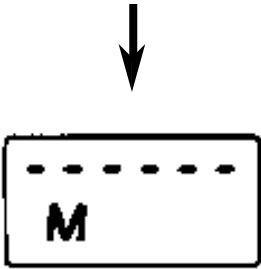


For more than 2 seconds

Press key  to select



Maximum fuel level displayed when the tank is not full



No gauge failure detection

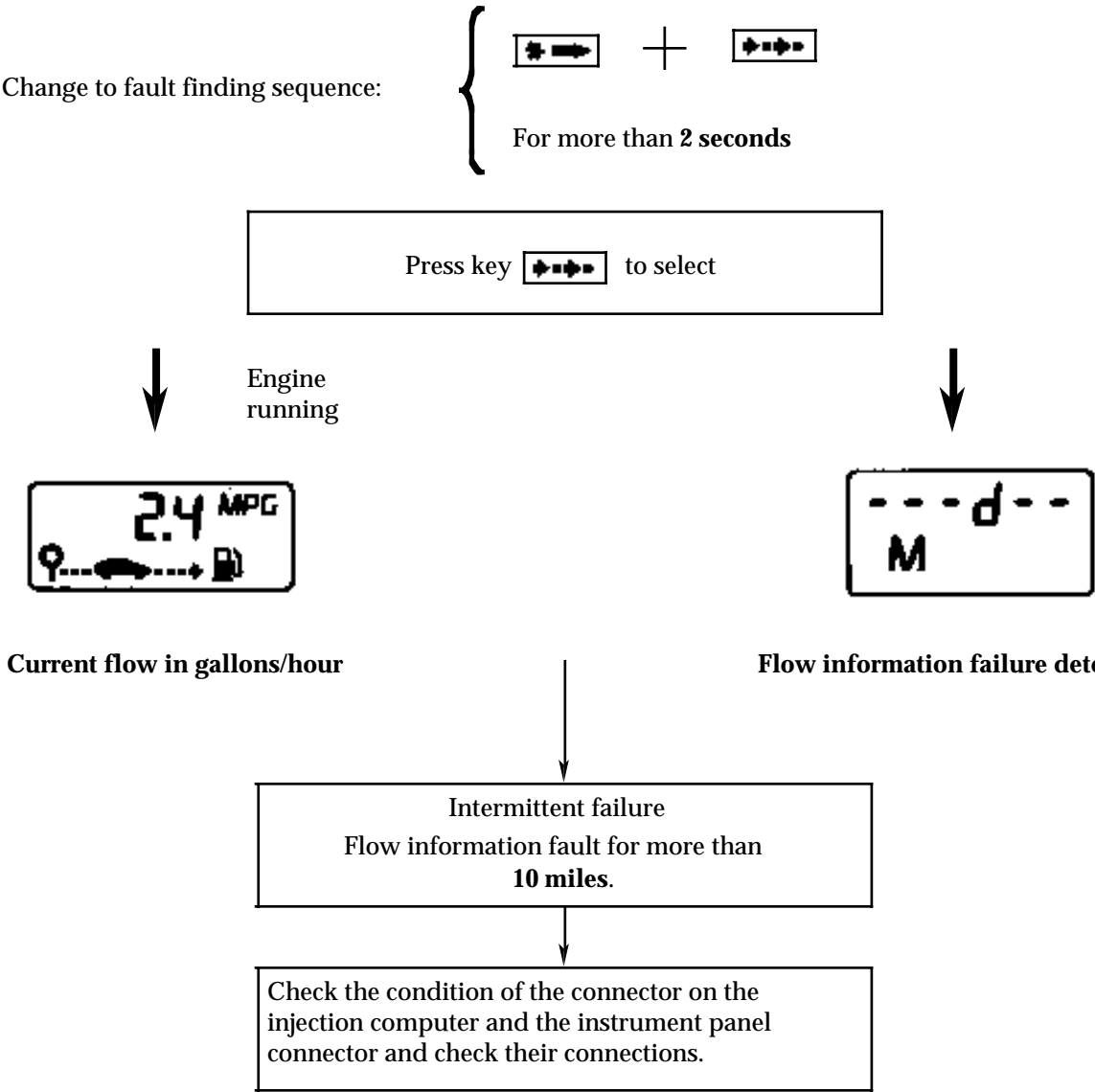
Gauge information short circuit

- Check:
- resistance of the fuel gauge (- 22.5 Ω/G),
 - insulation of the gauge line between the instrument panel blue connector and the gauge connector.

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

FAULT FINDING CHARTS

CHART 6	FLASHING OF SEVERAL FUNCTIONS	
NOTES	Instrument panel fault finding procedures are carried out with the ignition on.	
1st EXAMPLE	NOTES	None



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


FAULT FINDING CHARTS

CHART 6 CONT		
2nd EXAMPLE	NOTES	None

Change to fault finding sequence:

+

For more than 2 seconds

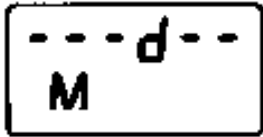
Press key  to select



Engine
running



Current flow in gallons/hour



Flow information failure detection



Flow information cut-off



Check the continuity and insulation of the flow information line between the injection computer and the instrument panel red connector.

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

FAULT FINDING CHARTS

CHART 7

INCORRECT OPERATION OF
OIL PRESSURE LEVEL RECEIVER

NOTES

Instrument panel fault finding procedures are carried out with the ignition on.

Change to fault finding sequence:



For more than **2 seconds**

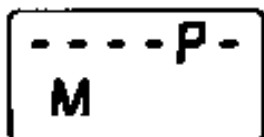
Check the movement of the needle (rest, minimum level, maximum level, maximum deviation).

GOOD

POOR

Change the instrument panel

Press key  to select



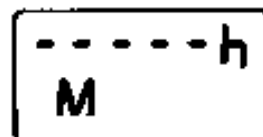
Oil pressure failure detection

Oil pressure sensor disconnected

If not

Using an ohmmeter, check:

- continuity of the oil pressure sensor,
- continuity and insulation of the oil pressure line.



Oil level failure detection

Oil level sensor disconnected

If not

Using an ohmmeter, check:

- resistance of the oil level sensor,
- continuity and insulation of the oil level line.



AFTER
REPAIR

Adjust the various instrument panel functions (clock, etc...) if necessary.
Check that all the instrument panel functions operate correctly.

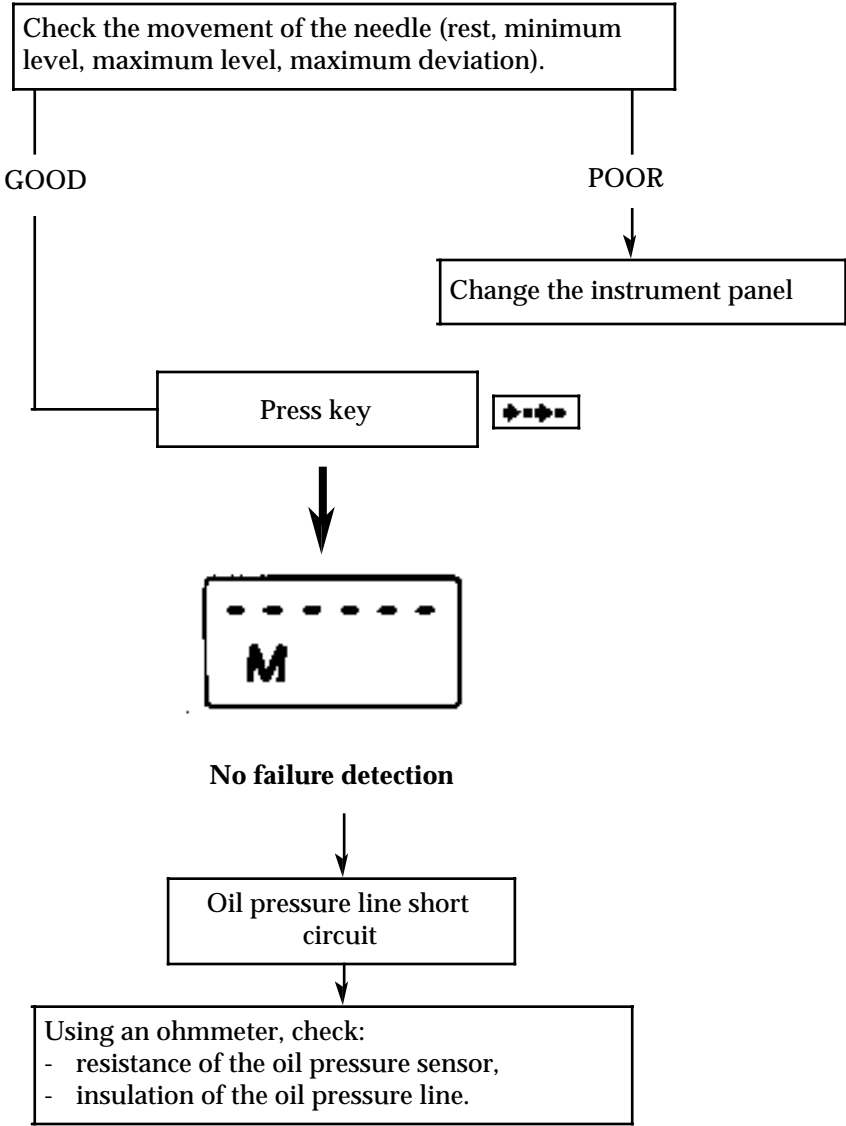
FAULT FINDING CHARTS

CHART 8	INCORRECT OPERATION OF OIL PRESSURE LEVEL RECEIVER IN PRESSURE MODE (NEEDLE AT MAXIMUM, IGNITION ON)
NOTES	Instrument panel fault finding procedures are carried out with the ignition on.

Change to fault finding sequence:

 + 

For more than 2 seconds



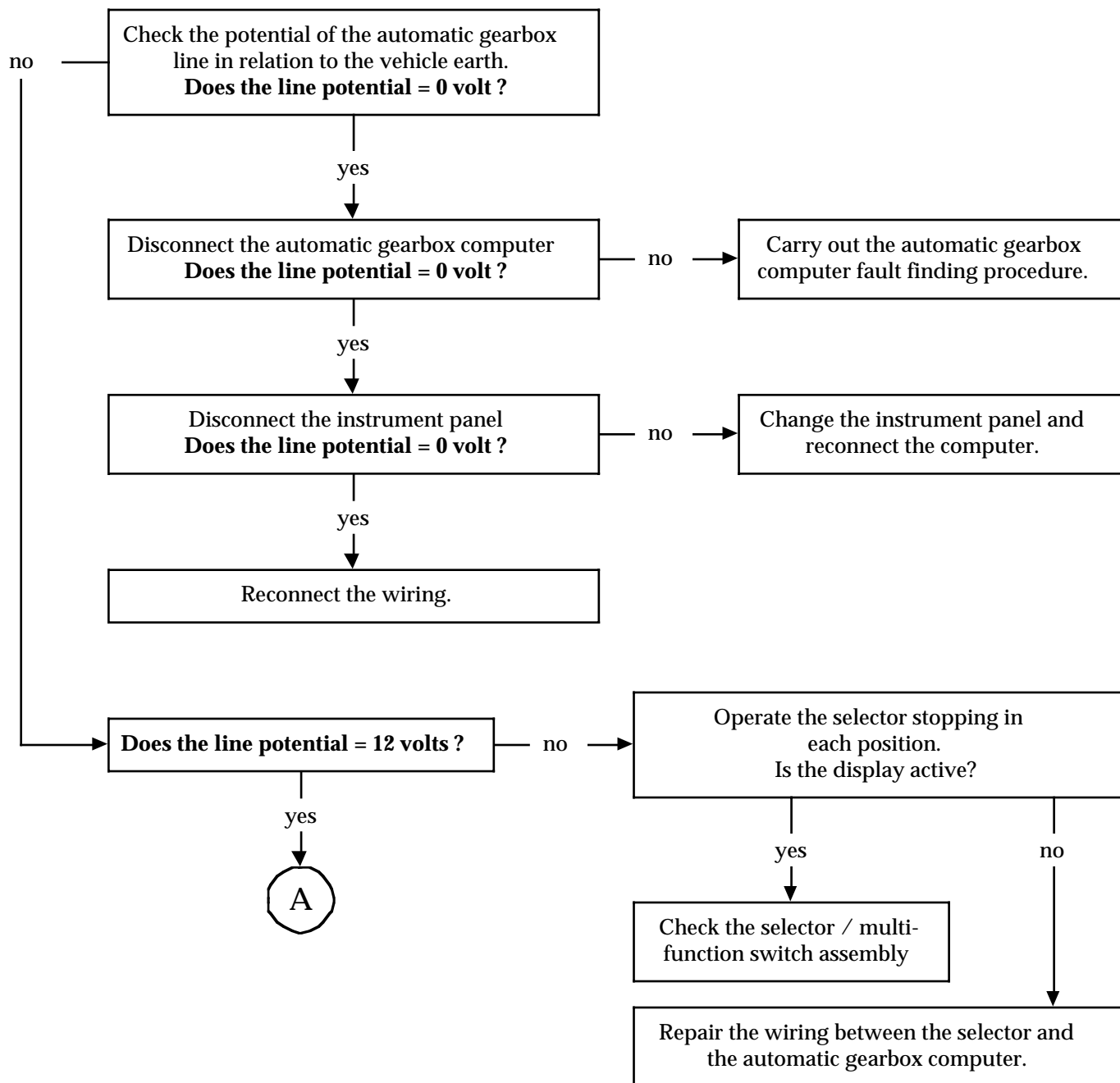
AFTER REPAIR	Adjust the various instrument panel functions (clock, etc...) if necessary. Check that all the instrument panel functions operate correctly.
--------------	---

FAULT FINDING CHARTS

CHART 9

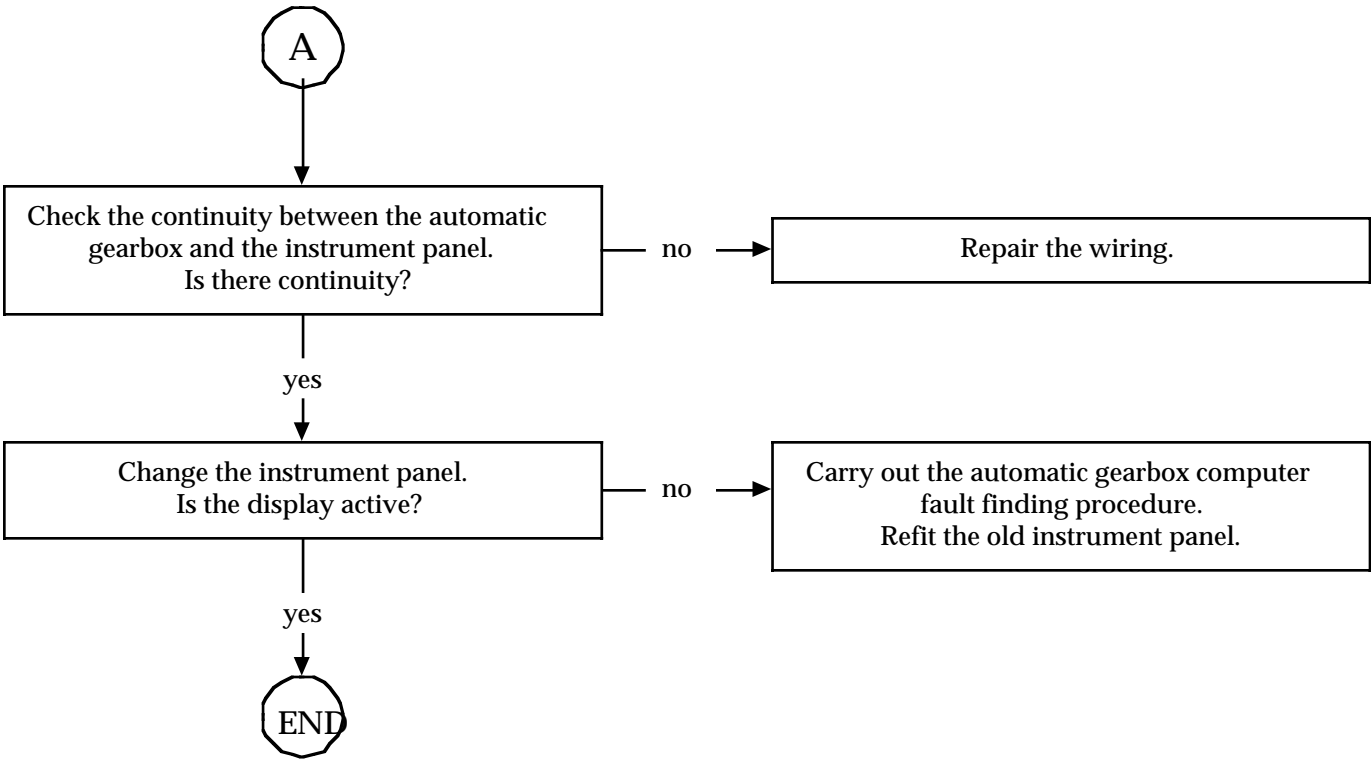
**NO MODE AND POSITION DISPLAY, WARNING LIGHT
ILLUMINATED OR FLASHING****NOTES**

Fault finding procedure for vehicles fitted with an automatic gearbox (BVA).

**AFTER
REPAIR**Adjust the various instrument panel functions (clock, etc...) if necessary.
Check that all the instrument panel functions operate correctly.

FAULT FINDING CHARTS

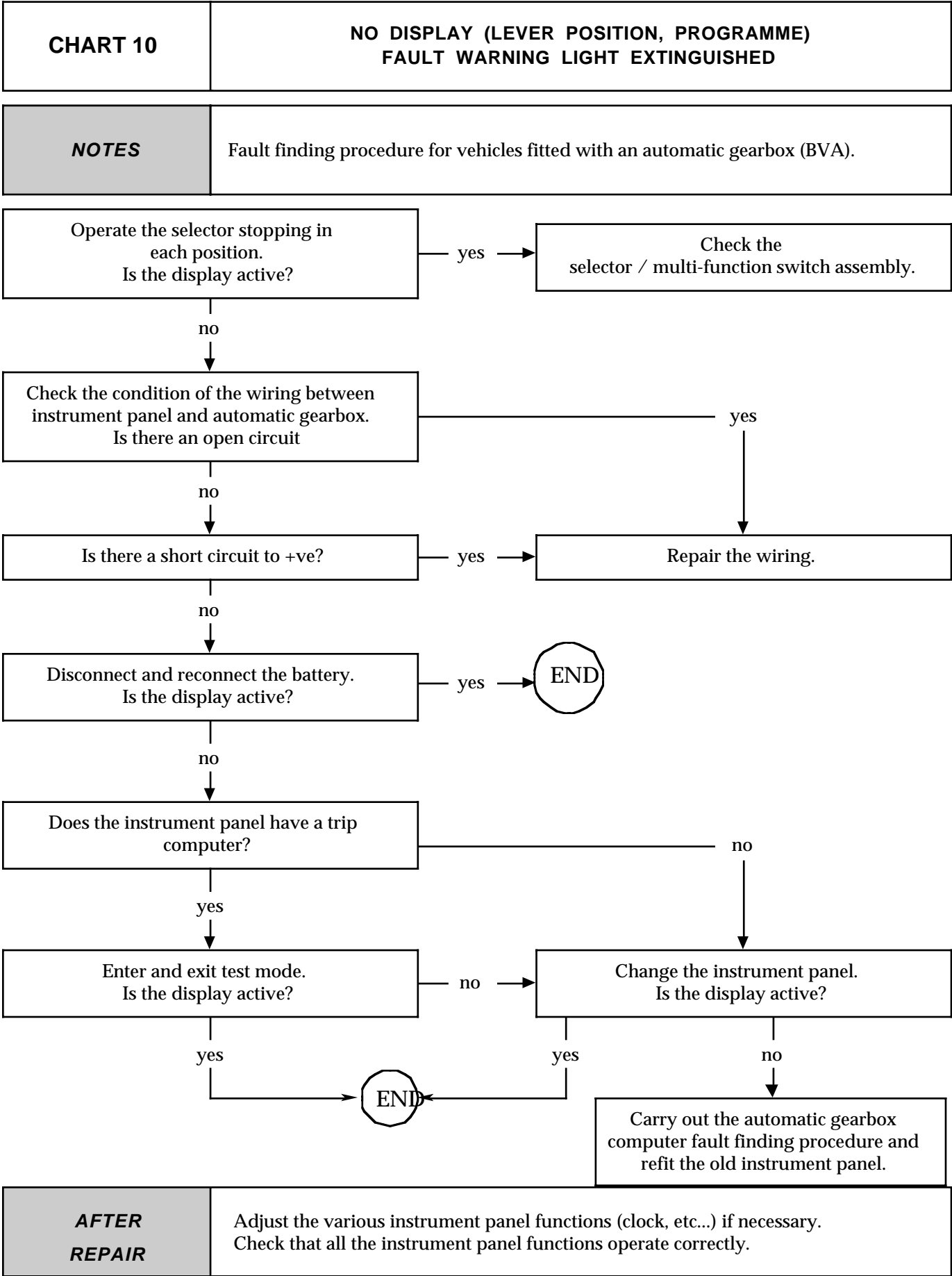
CHART 9
CONT



**AFTER
REPAIR**

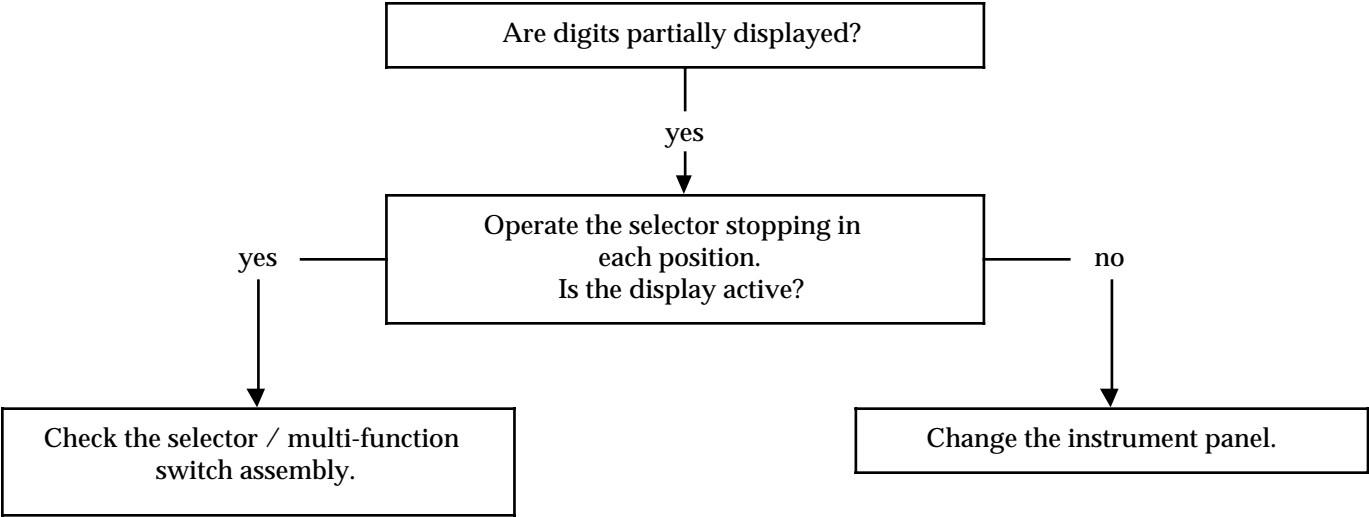
Adjust the various instrument panel functions (clock, etc...) if necessary.
Check that all the instrument panel functions operate correctly.

FAULT FINDING CHARTS



FAULT FINDING CHARTS

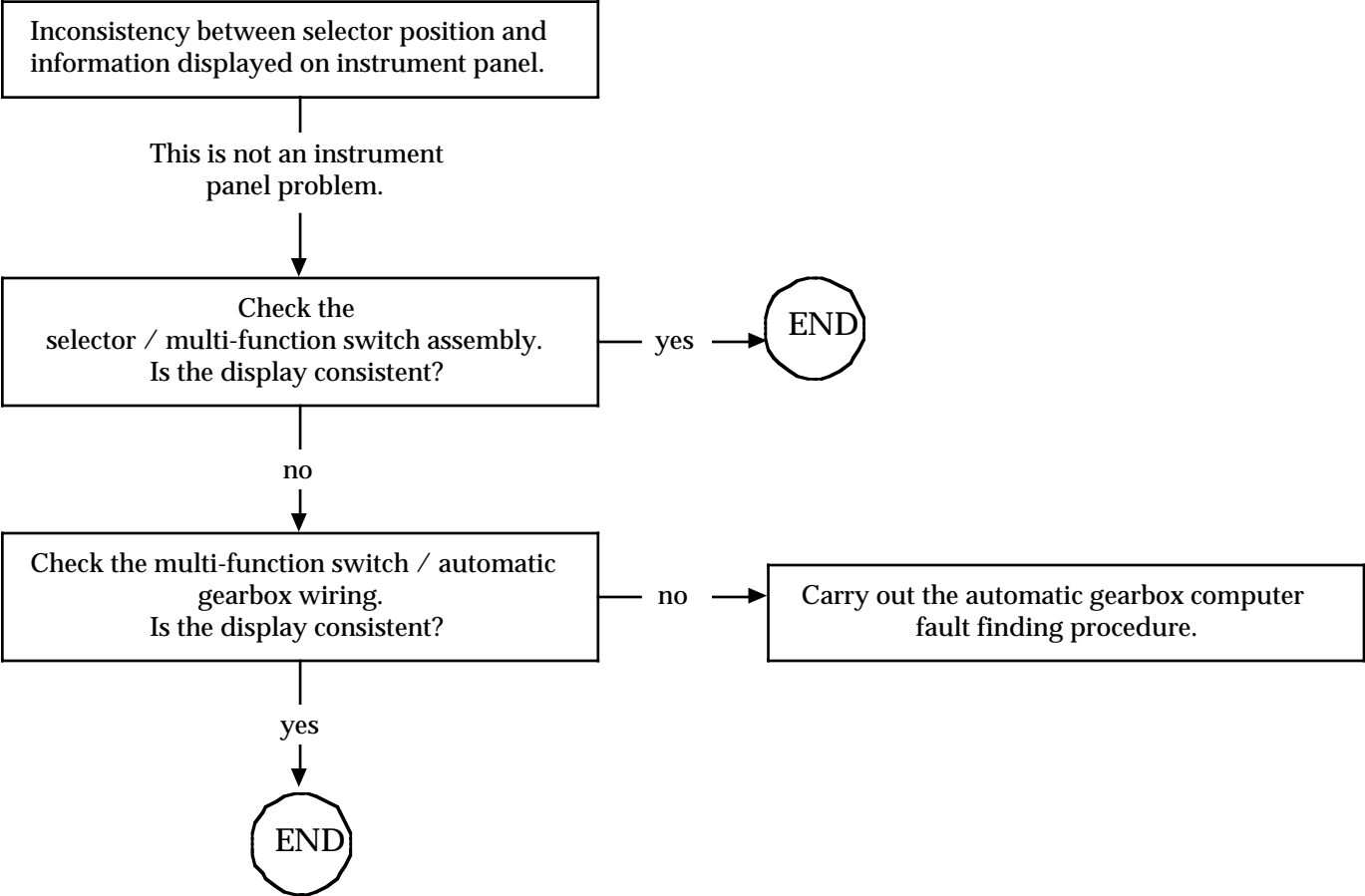
CHART 11	DIGITS PARTIALLY DISPLAYED
NOTES	Fault finding procedure for vehicles fitted with an automatic gearbox (BVA).



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

FAULT FINDING CHARTS

CHART 12	INCONSISTENCY BETWEEN SELECTOR POSITION AND INFORMATION DISPLAYED ON INSTRUMENT PANEL
NOTES	Fault finding procedure for vehicles fitted with an automatic gearbox (BVA).



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

FAULT FINDING -CUSTOMER COMPLAINTS

NOTES

Refer to the "Fault finding - Introduction" section before starting the fault finding procedure.

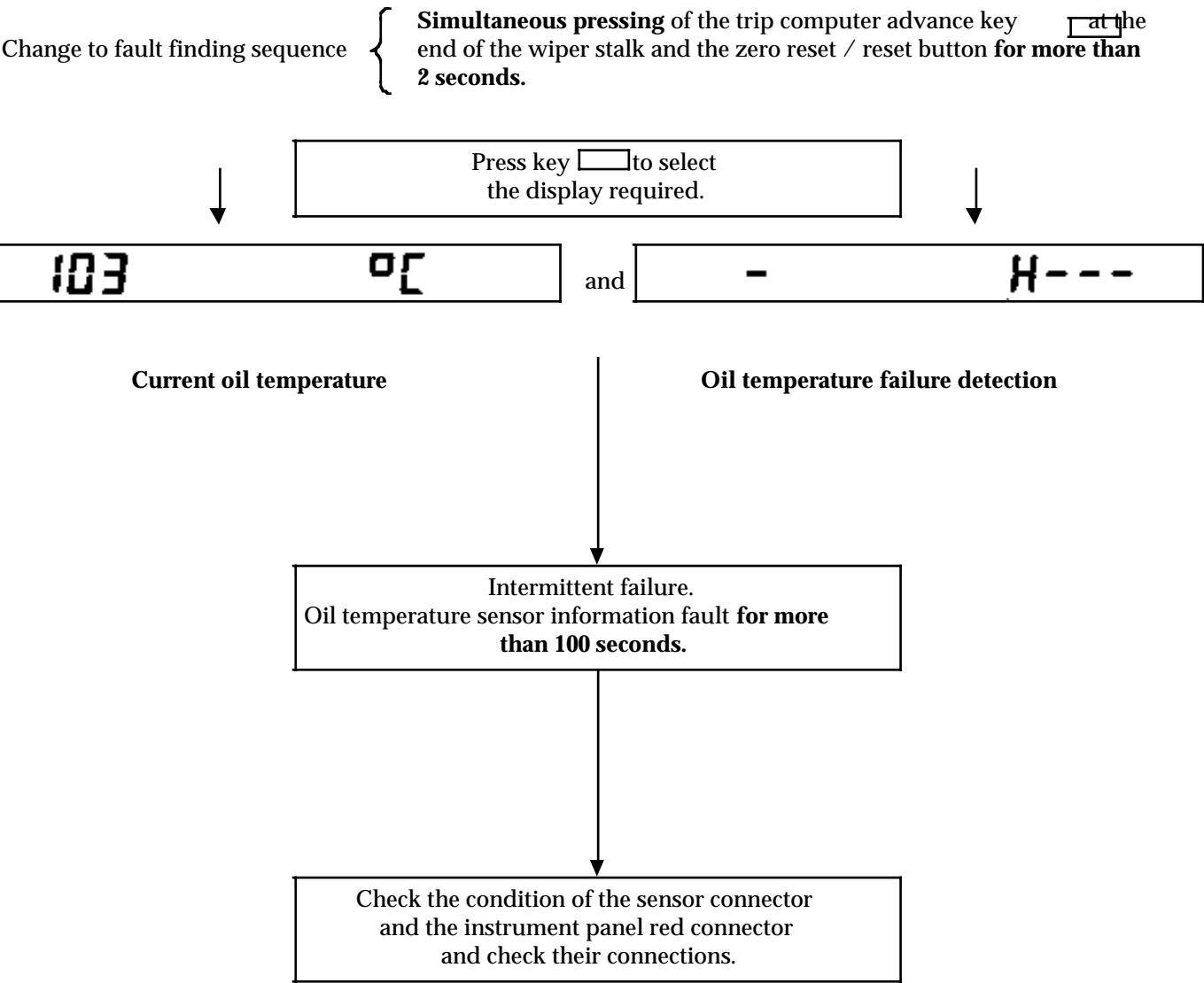
OIL DRAIN RANGE DECREASE CORRESPONDING EXACTLY TO THE DISTANCE COVERED*	CHART 1
FLASHING DASHES SOMETIMES DISPLAYED IN PLACE OF RANGE*	CHART 2
FLASHING DASHES DISPLAYED IN PLACE OF RANGE*	CHART 3
INCORRECT RANGE DISPLAY*	CHART 4
SEVERAL FUNCTIONS REPLACED BY FLASHING DASHES	CHART 5
INCORRECT OPERATION OF OIL LEVEL RECEIVER	CHART 6
COOLANT TEMPERATURE INDICATOR NEEDLE REMAINS AT MAXIMUM (IGNITION ON) ENGINE COLD	CHART 7
INCORRECT DISPLAY OF OIL LEVEL BUT TOTAL DISTANCE DISPLAYED	CHART 8
NEITHER OIL LEVEL NOR TOTAL DISTANCE DISPLAYED	CHART 9
NO DISPLAY OR PARTIAL DISPLAY OF TRIP COMPUTER	CHART 10
TRIP COMPUTER DISPLAY WITH PARTIAL LOSS OF SEGMENTS OR SEGMENTS AT HALF DENSITY	CHART 11
For vehicles fitted with an automatic gearbox:	
NO MODE AND POSITION DISPLAY FAULT WARNING LIGHT ILLUMINATED OR FLASHING	CHART 12
NO DISPLAY (LEVER POSITION, PROGRAMME) FAULT WARNING LIGHT EXTINGUISHED	CHART 13
DIGITS PARTIALLY DISPLAYED	CHART 14
INCONSISTENCY BETWEEN SELECTOR POSITION AND INFORMATION DISPLAYED ON INSTRUMENT PANEL	CHART 15

* : if vehicle manufactured before 30/09/96

Conventional instrument panel with trip computer

FAULT FINDING CHARTS

CHART 1	OIL DRAIN RANGE DECREASE CORRESPONDING EXACTLY TO THE DISTANCE COVERED	
NOTES	This fault finding procedure only applies to vehicles manufactured before 30/09/97. Instrument panel fault finding procedures are carried out with the ignition on.	
1st EXAMPLE	NOTES	None





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


FAULT FINDING CHARTS

CHART 1 CONT 1	
-------------------	--

2nd EXAMPLE	NOTES	None
-------------	-------	------

Change to fault finding sequence { Simultaneous pressing for more than 2 seconds of the trip computer advance key  at the end of the wiper stalk and the zero reset / reset button.

Press key  to select the display required.



 and

-

H---

Current oil temperature

Oil temperature failure detection

Oil temperature sensor information cut-off or short circuit for more than 100 seconds.

Check the condition of the oil temperature sensor connector and the instrument panel red connector and check their connections.

poor → Repair.

good

Check the continuity of the oil temperature sensor and the presence of a resistance of between 40 Ω and 2 kΩ

poor → Change the oil temperature sensor.

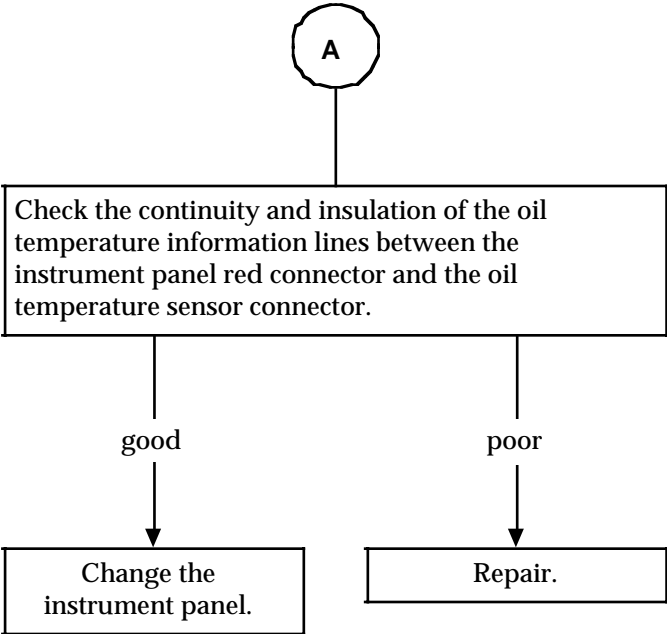
good



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

FAULT FINDING CHARTS


CHART 1 CONT 2	
-------------------	--

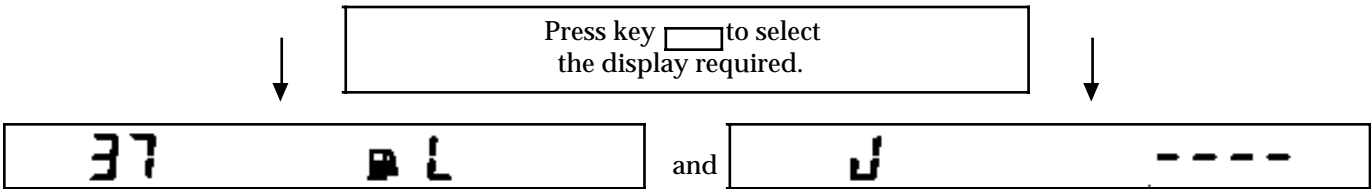


AFTER REPAIR	Adjust the various instrument panel functions (clock, etc, ...) if necessary. Check that all the instrument panel functions operate correctly. New instrument panels must be configured (see Workshop Repair Manual MR 307 and Technical Note NT 2632A).
-----------------	--

FAULT FINDING CHARTS

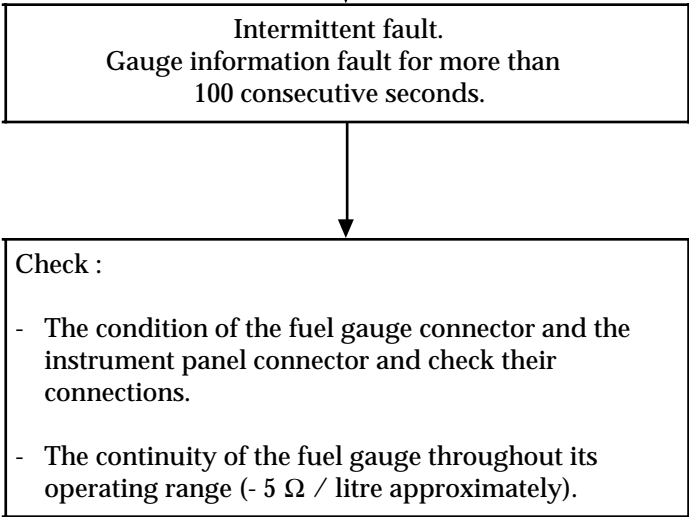
CHART 2	FLASHING DASHES SOMETIMES DISPLAYED IN PLACE OF RANGE
NOTES	This fault finding procedure only applies to vehicles manufactured before 30/09/97. Instrument panel fault finding procedures are carried out with the ignition on.

Change to fault finding sequence { Simultaneous pressing for more than 2 seconds of the trip computer advance key  at the end of the wiper stalk and the zero reset / reset button.



The value displayed (quantity of fuel remaining) should be the conversion of the gauge resistance.
If the display is less than or equal to 6 litres, the fuel low signal is transmitted.


Gauge failure detection.

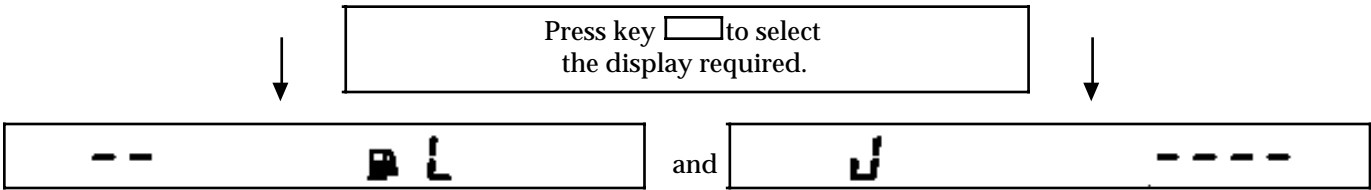


AFTER REPAIR	Adjust the various instrument panel functions (clock, etc, ...) if necessary. Check that all the instrument panel functions operate correctly.
--------------	--

FAULT FINDING CHARTS

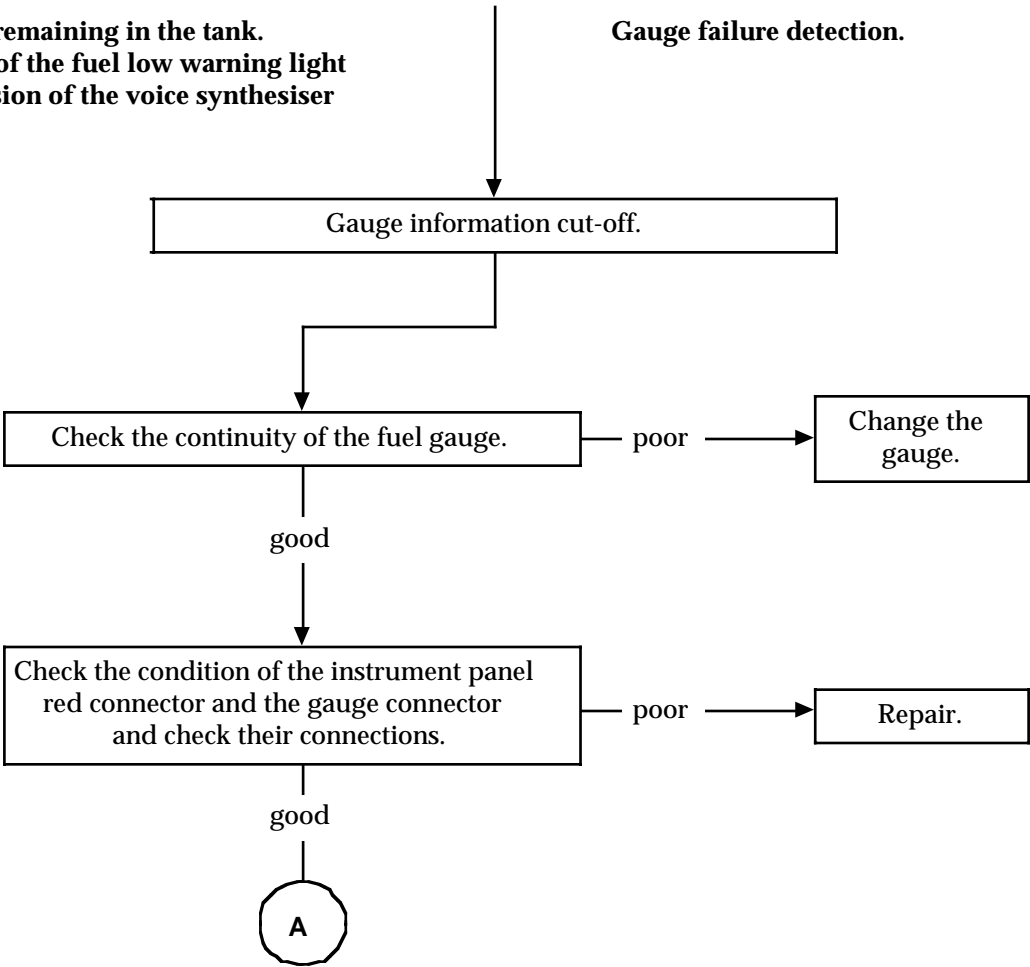
CHART 3	FLASHING DASHES DISPLAYED IN PLACE OF RANGE
NOTES	This fault finding procedure only applies to vehicles manufactured before 30/09/97. Instrument panel fault finding procedures are carried out with the ignition on.

Change to fault finding sequence { Simultaneous pressing for more than 2 seconds of the trip computer advance key  at the end of the wiper stalk and the zero reset / reset button.



Level of fuel remaining in the tank.
Illumination of the fuel low warning light
and transmission of the voice synthesiser
message.

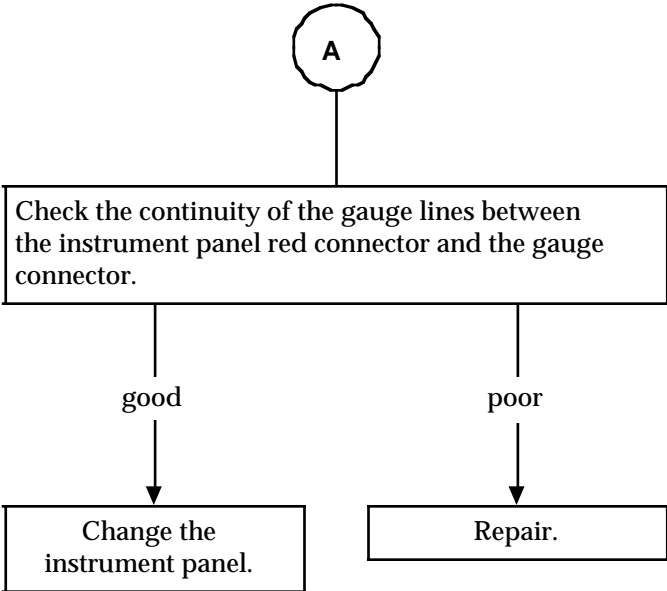
Gauge failure detection.



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

FAULT FINDING CHARTS


CHART 3 CONT	
-----------------	--

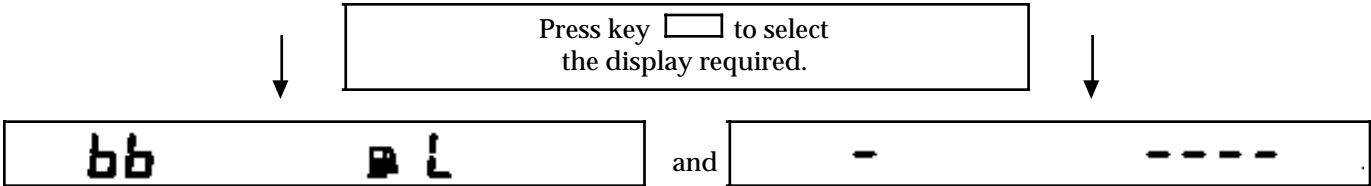


AFTER REPAIR	Adjust the various instrument panel functions (clock, etc, ...) if necessary. Check that all the instrument panel functions operate correctly. New instrument panels must be configured (see Workshop Repair Manual MR 307 and Technical Note NT 2632A).
-----------------	--

FAULT FINDING CHARTS

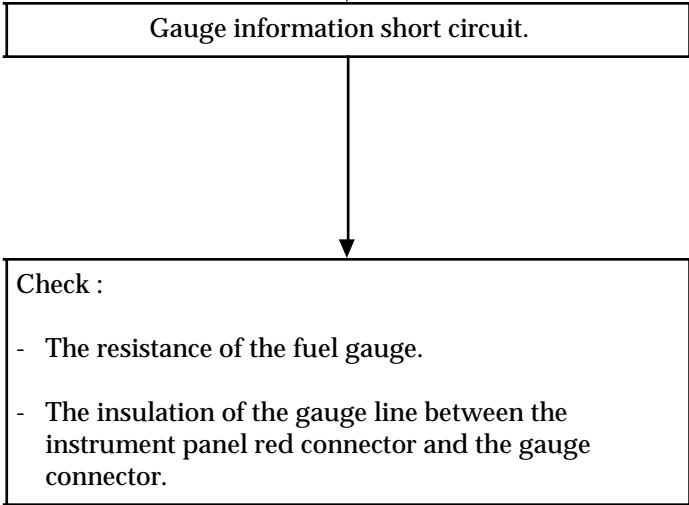
CHART 4	INCORRECT RANGE DISPLAY
NOTES	This fault finding procedure only applies to vehicles manufactured before 30/09/97. Instrument panel fault finding procedures are carried out with the ignition on.

Change to fault finding sequence { **Simultaneous pressing for more than 2 seconds** of the trip computer advance key  at the end of the wiper stalk and the zero reset / reset button.



Maximum fuel level displayed when the tank is not full.

No gauge failure detection.

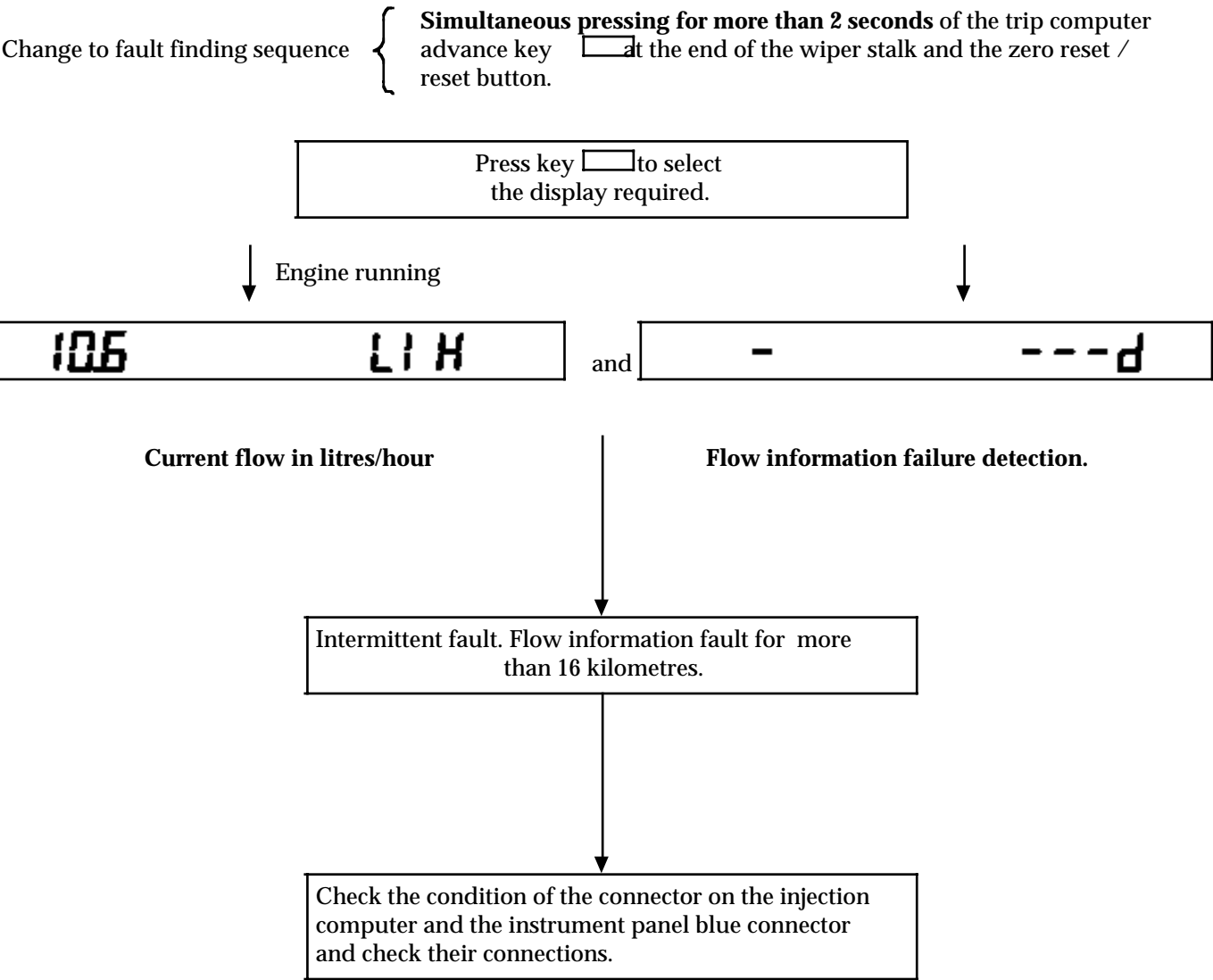


AFTER REPAIR	Adjust the various instrument panel functions (clock, etc, ...) if necessary. Check that all the instrument panel functions operate correctly.
--------------	--

Conventional instrument panel with trip computer

FAULT FINDING CHARTS


CHART 5	SEVERAL FUNCTION REPLACED BY FLASHING DASHES	
NOTES	Instrument panel fault finding procedures are carried out with the ignition on.	
1st EXAMPLE	NOTES	None




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


FAULT FINDING CHARTS

CHART 5 CONT		
2nd EXAMPLE	NOTES	None


Change to fault finding sequence { Simultaneous pressing for more than 2 seconds of the trip computer advance key  at the end of the wiper stalk and the zero reset / reset button.

Press key  to select the display required.

↓ Engine running



and



Current flow in litres/hour

Flow information failure detection.

Flow information cut-off.

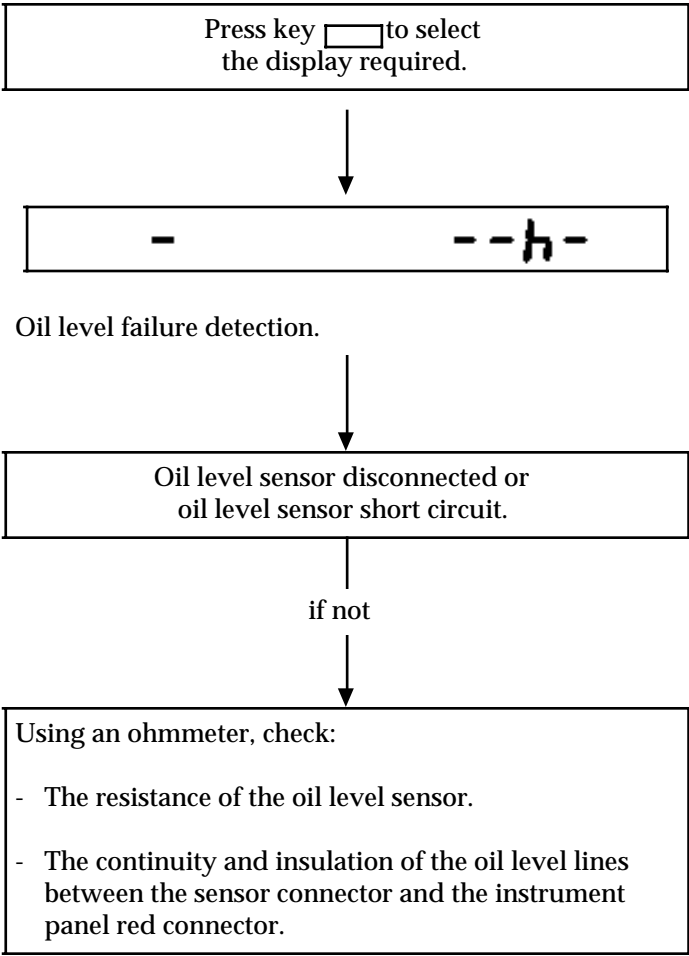
Check the continuity and insulation of the flow information line between the injection computer and the instrument panel blue connector.

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

FAULT FINDING CHARTS

CHART 6	INCORRECT OPERATION OF OIL LEVEL RECEIVER
NOTES	Instrument panel fault finding procedures are carried out with the ignition on.

Change to fault finding sequence { Simultaneous pressing for more than 2 seconds of the trip computer advance key ☐ at the end of windscreen wiper stalk and the zero reset / reset button.

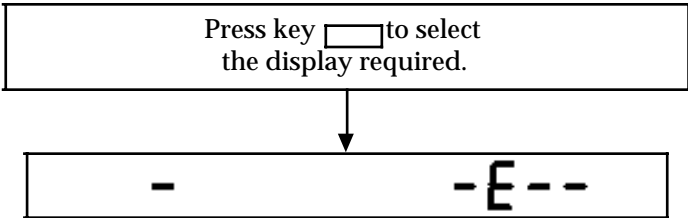


AFTER REPAIR	Adjust the various instrument panel function (clock, etc, ...) if necessary. Check that all the instrument panel functions operate correctly.
--------------	---

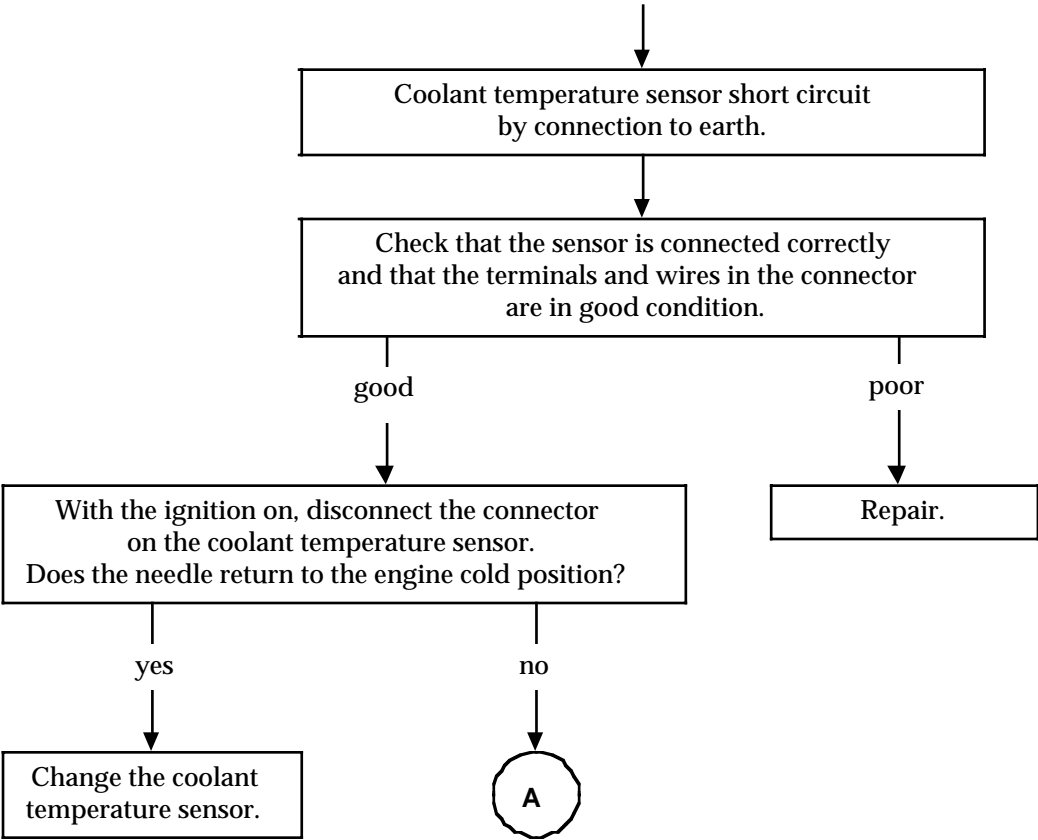
FAULT FINDING CHARTS

CHART 7	COOLANT TEMPERATURE INDICATOR NEEDLE REMAINS AT MAXIMUM (IGNITION ON) ENGINE COLD
NOTES	Instrument panel fault finding procedures are carried out with the ignition on.

Change to fault finding sequence { Simultaneous pressing for more than 2 seconds of the trip computer advance key ☐ at the end of windscreen wiper stalk and the zero reset / reset button.



Coolant temperature sensor failure detection.

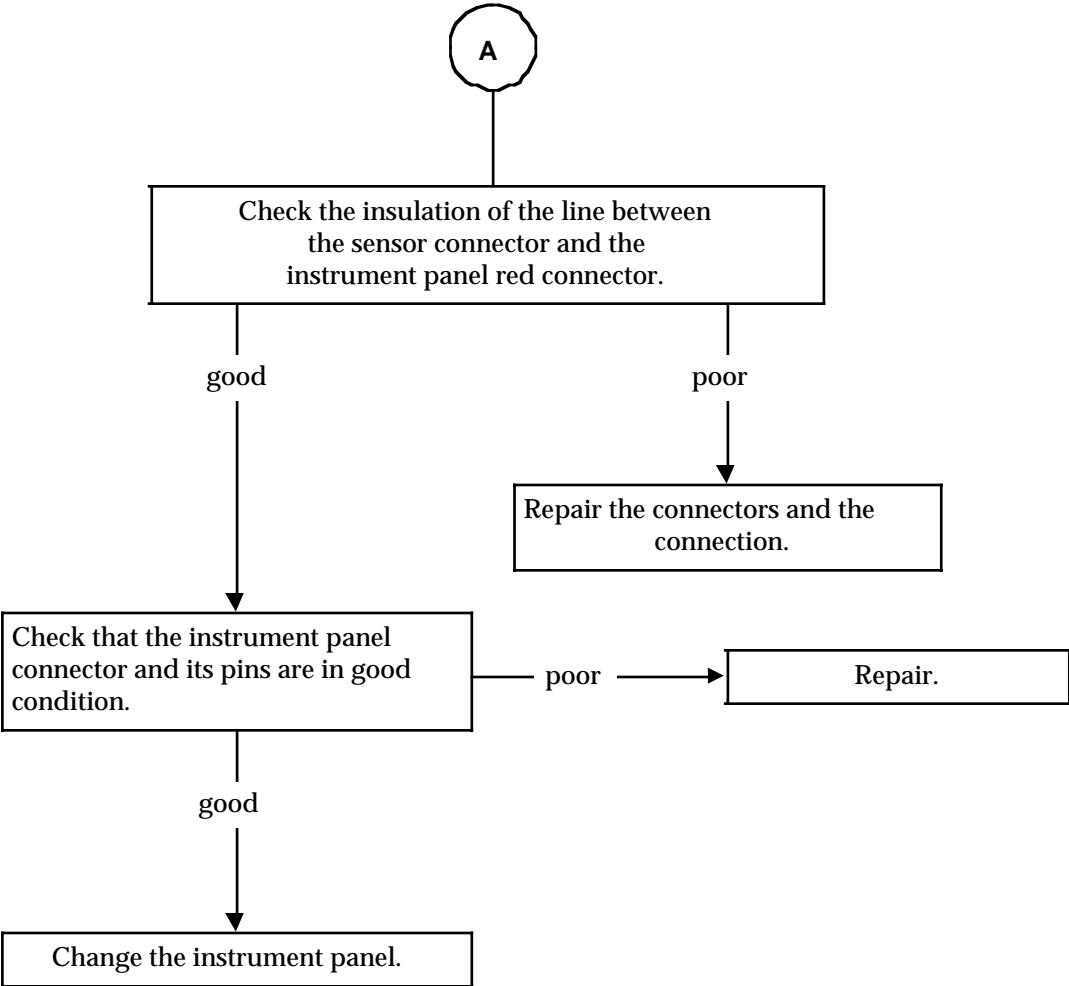


AFTER REPAIR	Adjust the various instrument panel function (clock, etc, ...) if necessary. Check that all the instrument panel functions operate correctly.
--------------	---

Conventional instrument panel with trip computer

FAULT FINDING CHARTS

CHART 7 CONT	
-----------------	--

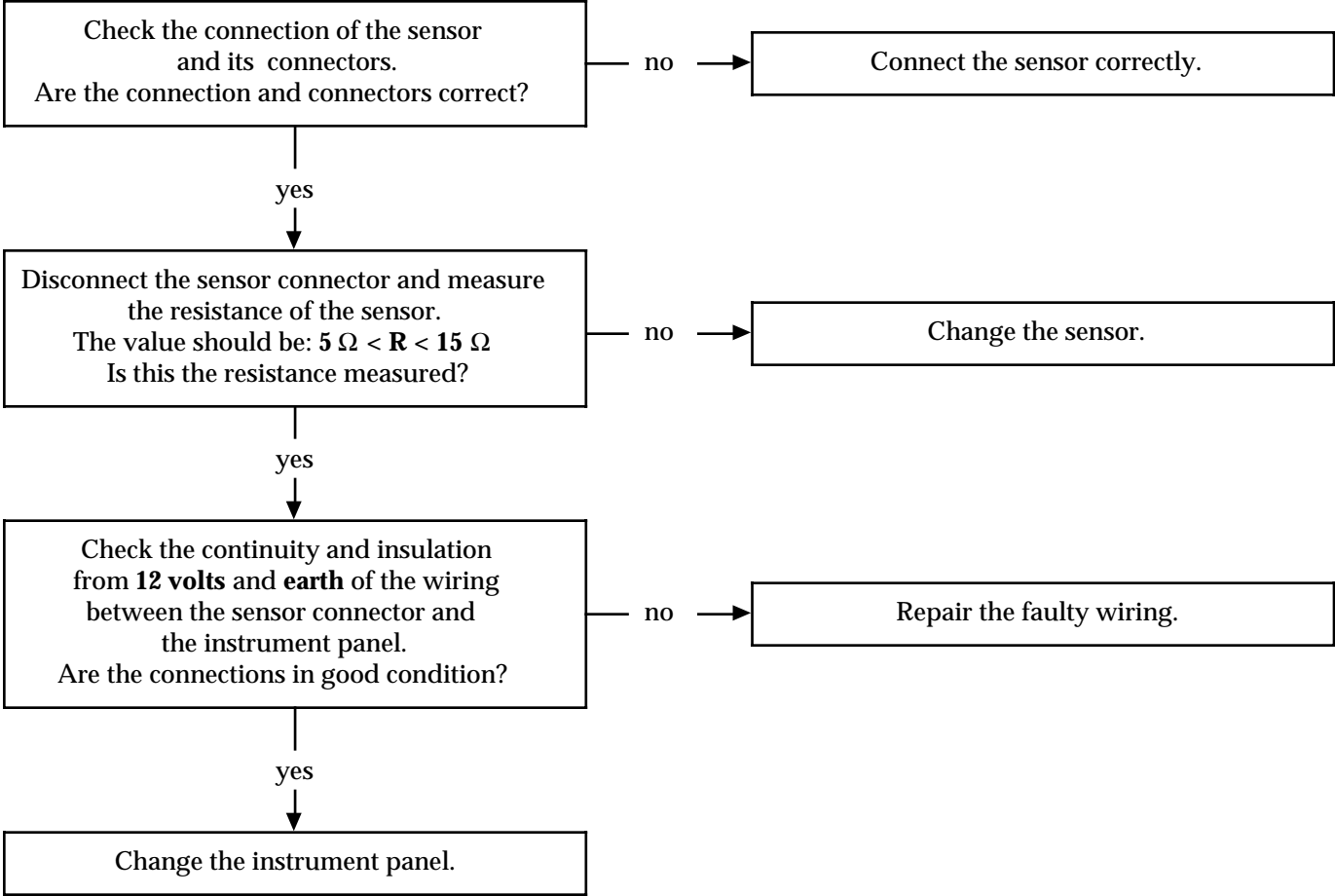


AFTER REPAIR	Adjust the various instrument panel functions (clock, etc, ...) if necessary. Check that all the instrument panel functions operate correctly. New instrument panels must be configured (see Workshop Repair Manual MR 307 and Technical Note NT 2632A).
-----------------	--

FAULT FINDING CHARTS

CHART 8	INCORRECT DISPLAY OF OIL LEVEL, BUT TOTAL DISTANCE DISPLAYED
---------	---

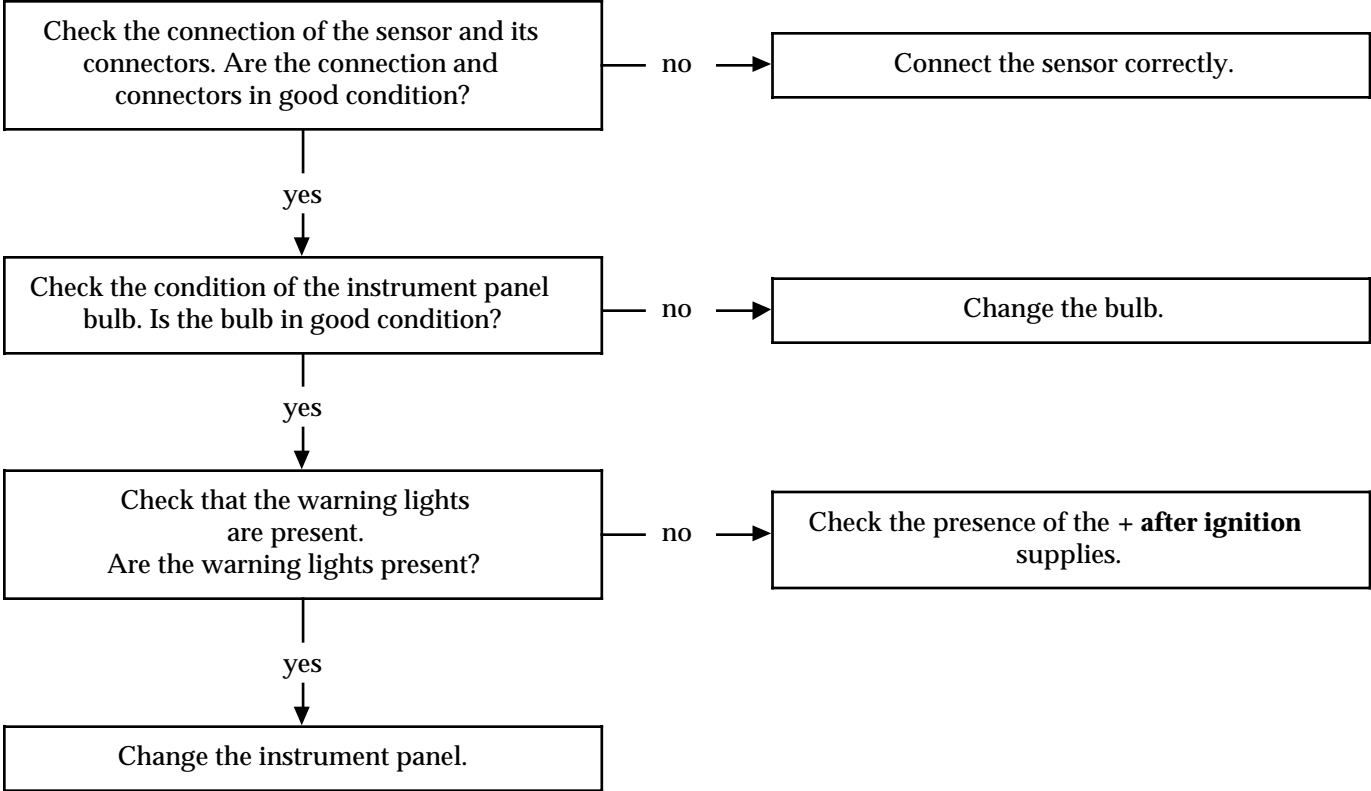
NOTES	Instrument panel fault finding procedures are carried out with the ignition on. Change to fault finding sequence: - keep the zero reset / reset / trip computer advance button at the end of the windscreen wiper stalk pressed and switch on the ignition.
-------	--



AFTER REPAIR	Adjust the various instrument panel function (clock, etc, ...) if necessary. Check that all the instrument panel functions operate correctly.
--------------	--

FAULT FINDING CHARTS

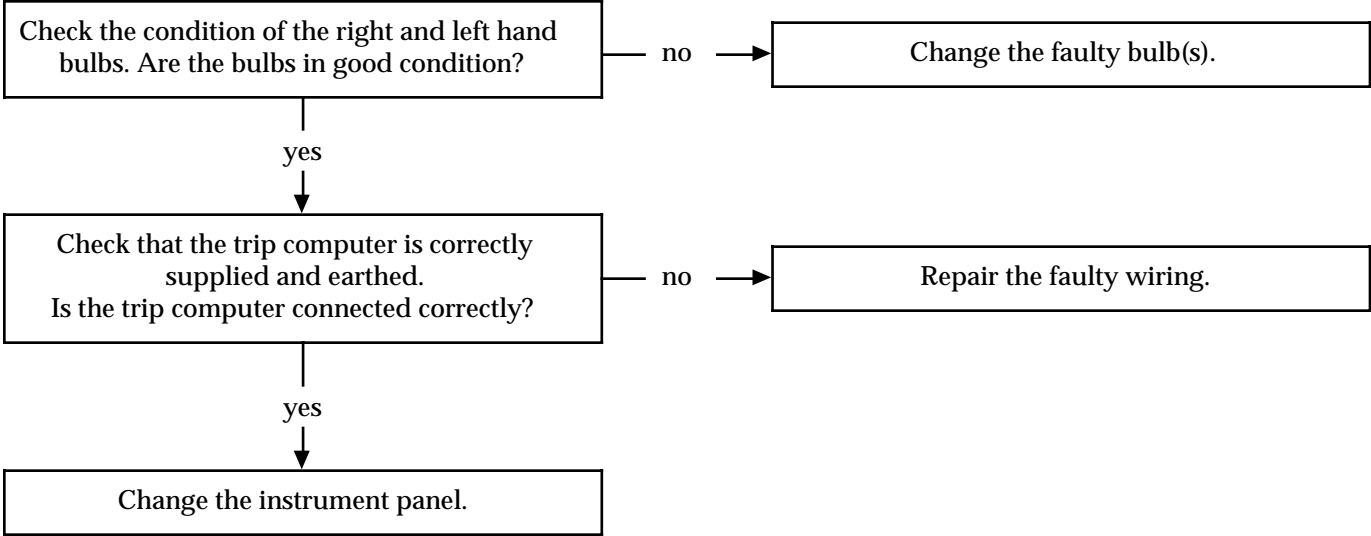
CHART 9	NEITHER OIL LEVEL NOR TOTAL DISTANCE DISPLAYED
NOTES	Instrument panel fault finding procedures are carried out with the ignition on. Change to fault finding sequence: - keep the zero reset / reset / trip computer advance button at the end of the windscreen wiper stalk pressed and switch on the ignition.



AFTER REPAIR	Adjust the various instrument panel function (clock, etc, ...) if necessary. Check that all the instrument panel functions operate correctly.
--------------	--

FAULT FINDING CHARTS

CHART 10	NO DISPLAY OF PARTIAL DISPLAY OF TRIP COMPUTER
NOTES	Instrument panel fault finding procedures are carried out with the ignition on. Change to fault finding sequence: - keep the zero reset / reset / trip computer advance button at the end of the windscreen wiper stalk pressed and switch on the ignition.



AFTER REPAIR	Adjust the various instrument panel function (clock, etc, ...) if necessary. Check that all the instrument panel functions operate correctly.
--------------	--

FAULT FINDING CHARTS

CHART 11	TRIP COMPUTER DISPLAY WITH PARTIAL LOSS OF SEGMENTS OR SEGMENTS AT HALF TONE
NOTES	Instrument panel fault finding procedures are carried out with the ignition on. Change to fault finding sequence: - keep the zero reset / reset / trip computer advance button at the end of the windscreen wiper stalk pressed and switch on the ignition.

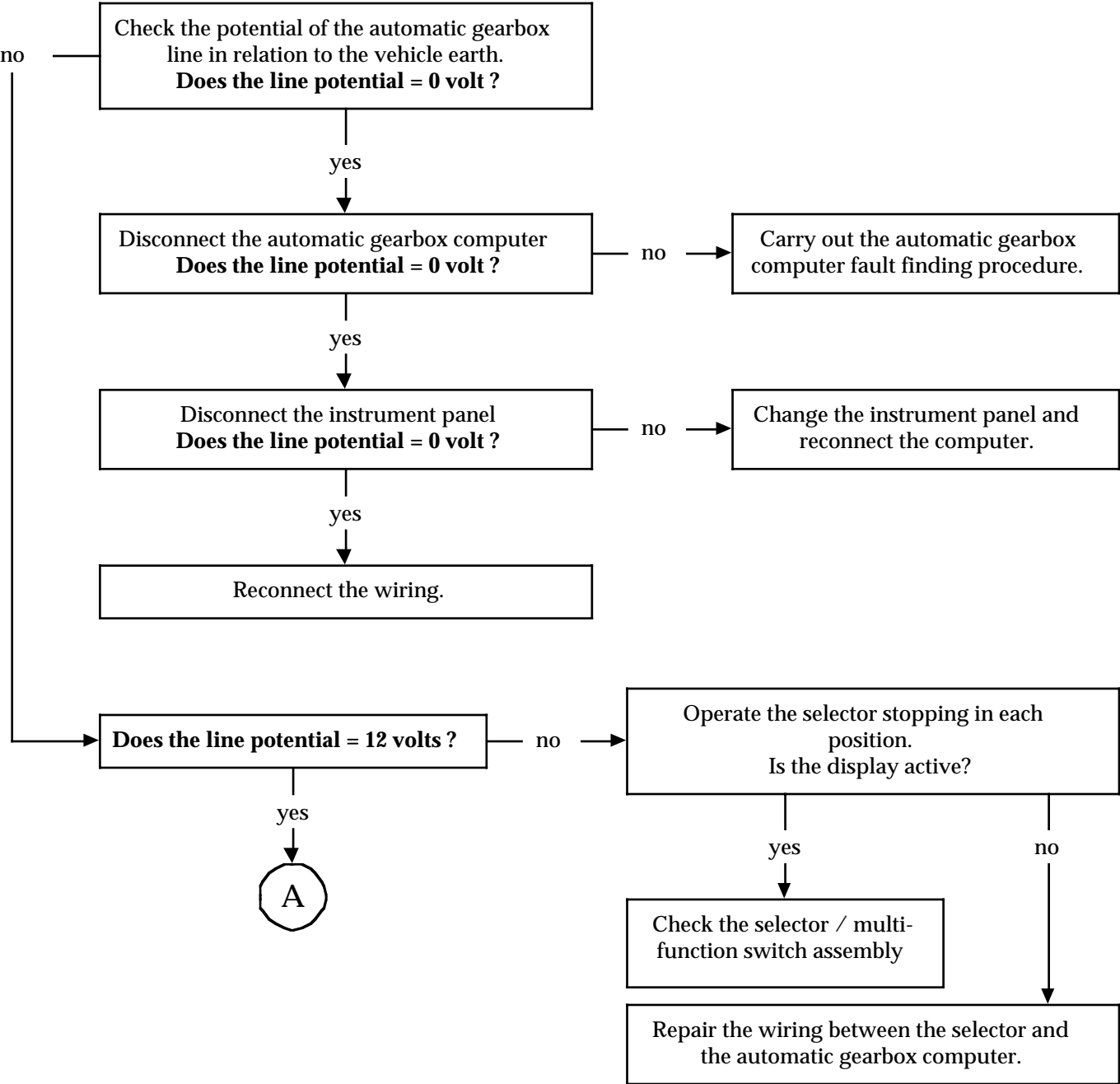
Change the instrument panel.

AFTER REPAIR	Adjust the various instrument panel function (clock, etc, ...) if necessary. Check that all the instrument panel functions operate correctly.
--------------	--

FAULT FINDING CHARTS

CHART 12	NO MODE AND POSITION DISPLAY FAULT WARNING LIGHT ILLUMINATED OR FLASHING
----------	---

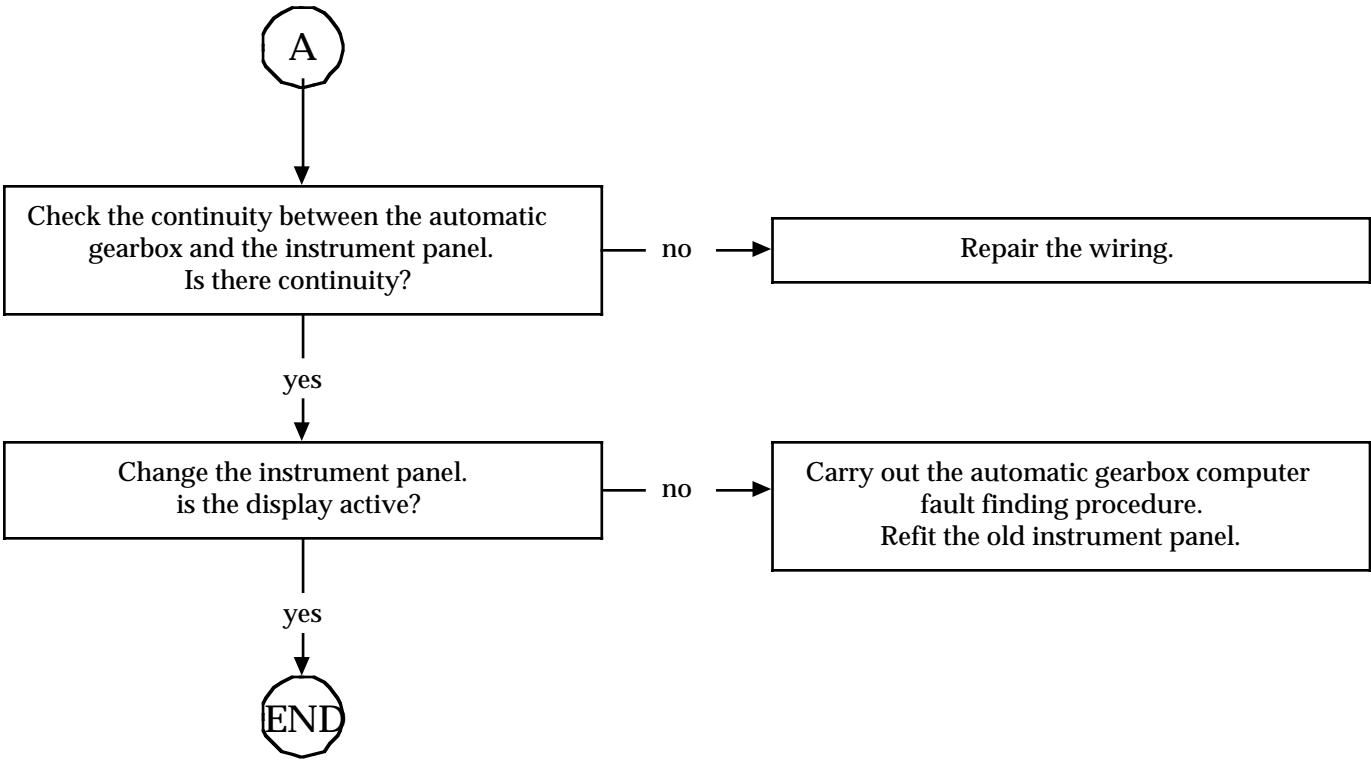
NOTES	Fault finding procedure for vehicles fitted with an automatic gearbox (BVA).
-------	--



AFTER REPAIR	Adjust the various instrument panel function (clock, etc, ...) if necessary. Check that all the instrument panel functions operate correctly.
--------------	--

FAULT FINDING CHARTS

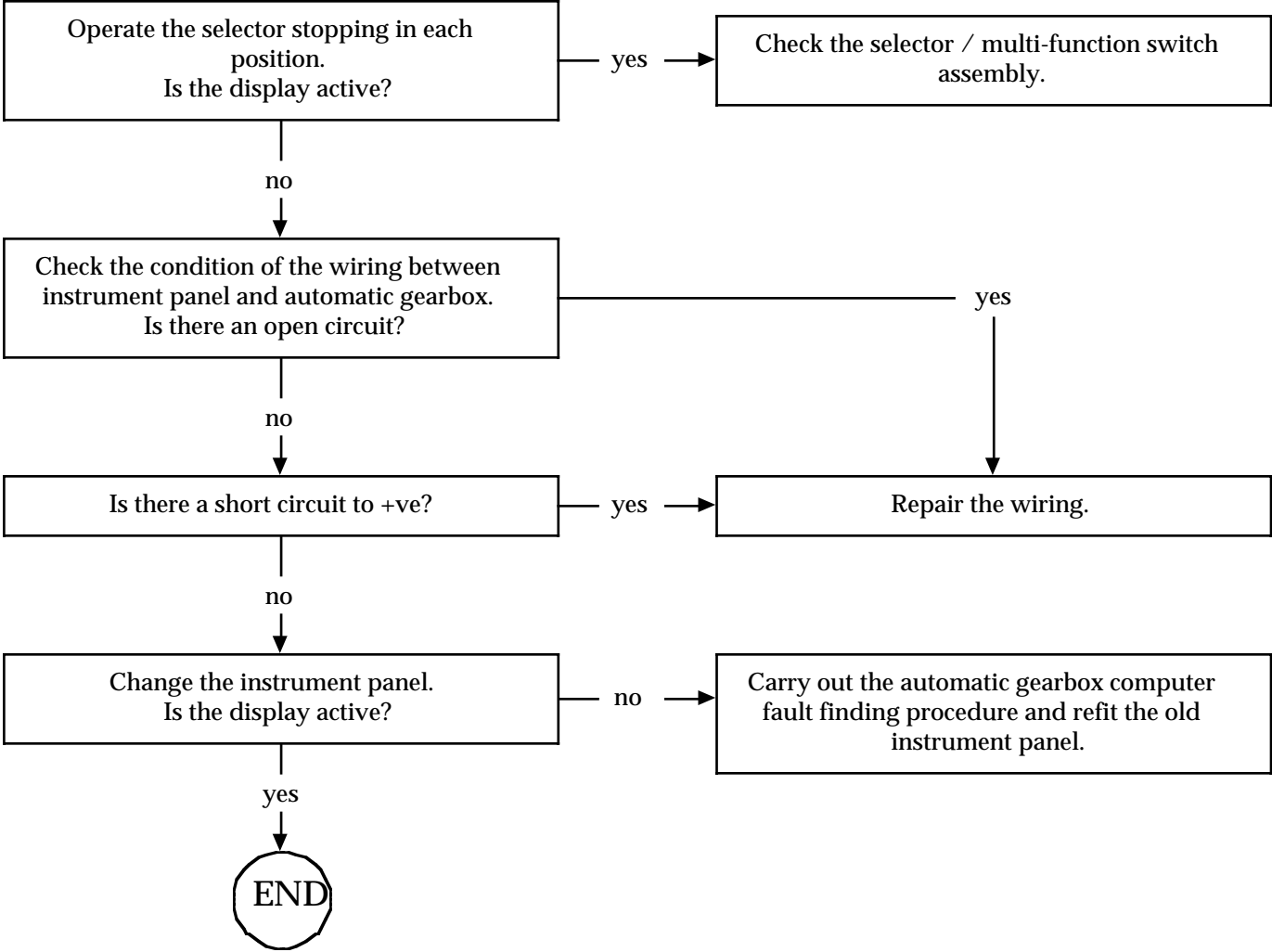
CHART 12 CONT	
------------------	--



AFTER REPAIR	Adjust the various instrument panel function (clock, etc, ...) if necessary. Check that all the instrument panel functions operate correctly.
-----------------	--

FAULT FINDING CHARTS

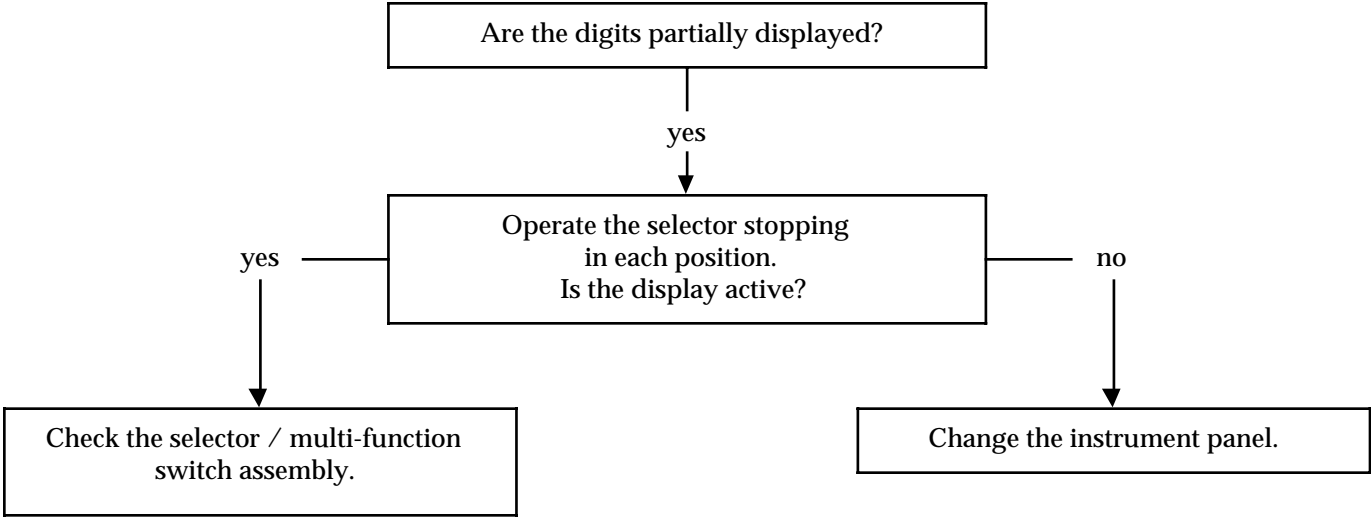
CHART 13	NO DISPLAY (LEVER POSITION, PROGRAMME) FAULT WARNING LIGHT EXTINGUISHED
NOTES	Fault finding procedure for vehicles fitted with an automatic gearbox (BVA).



AFTER REPAIR	Adjust the various instrument panel function (clock, etc, ...) if necessary. Check that all the instrument panel functions operate correctly.
--------------	--

FAULT FINDING CHARTS

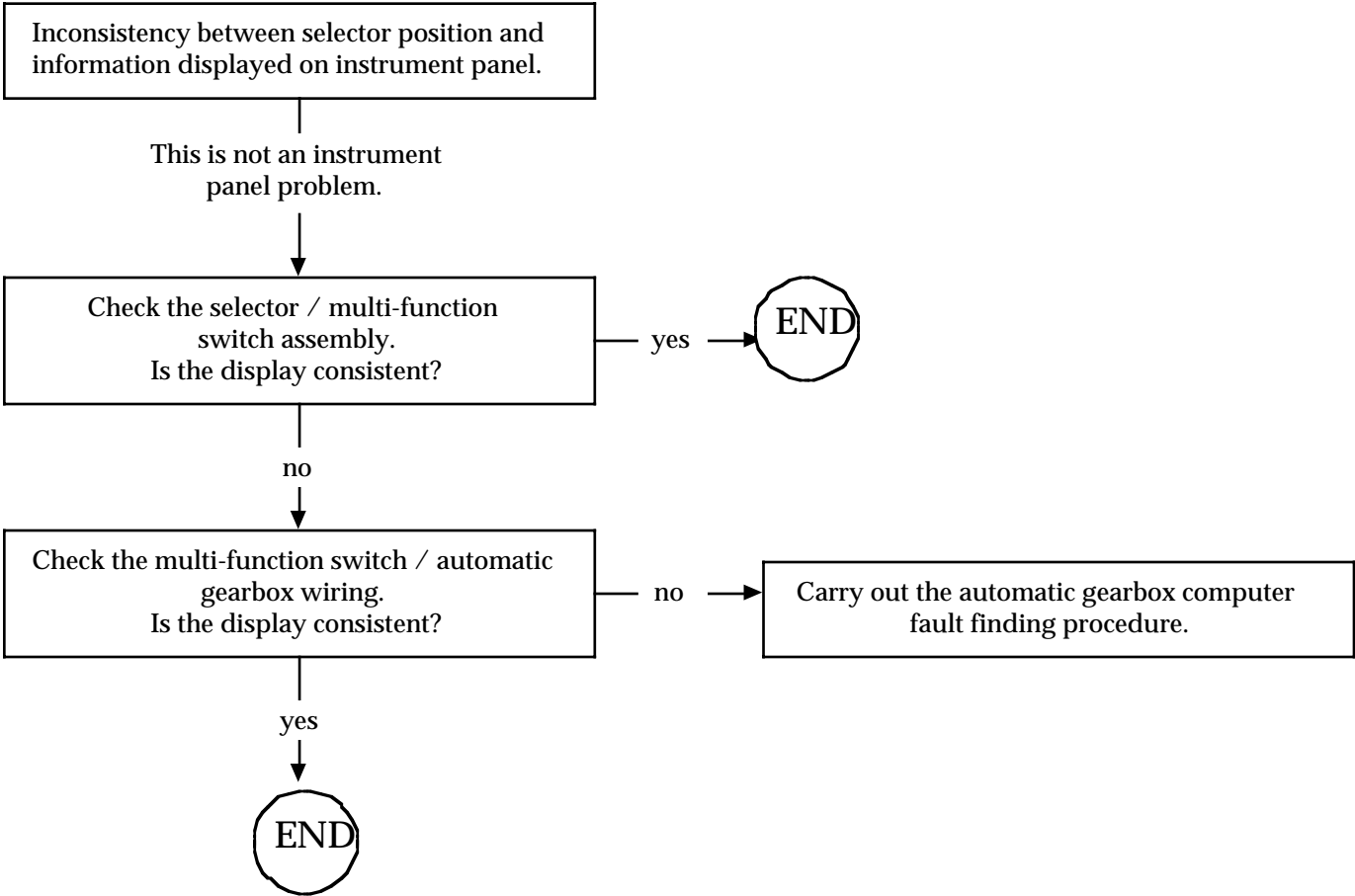
CHART 14	DIGITS PARTIALLY DISPLAYED
NOTES	Fault finding procedure for vehicles fitted with an automatic gearbox (BVA).



AFTER REPAIR	Adjust the various instrument panel function (clock, etc, ...) if necessary. Check that all the instrument panel functions operate correctly.
--------------	--

FAULT FINDING CHARTS

CHART 15	INCONSISTENCY BETWEEN SELECTOR POSITION AND INFORMATION DISPLAYED ON INSTRUMENT PANEL
NOTES	Fault finding procedure for vehicles fitted with an automatic gearbox (BVA).



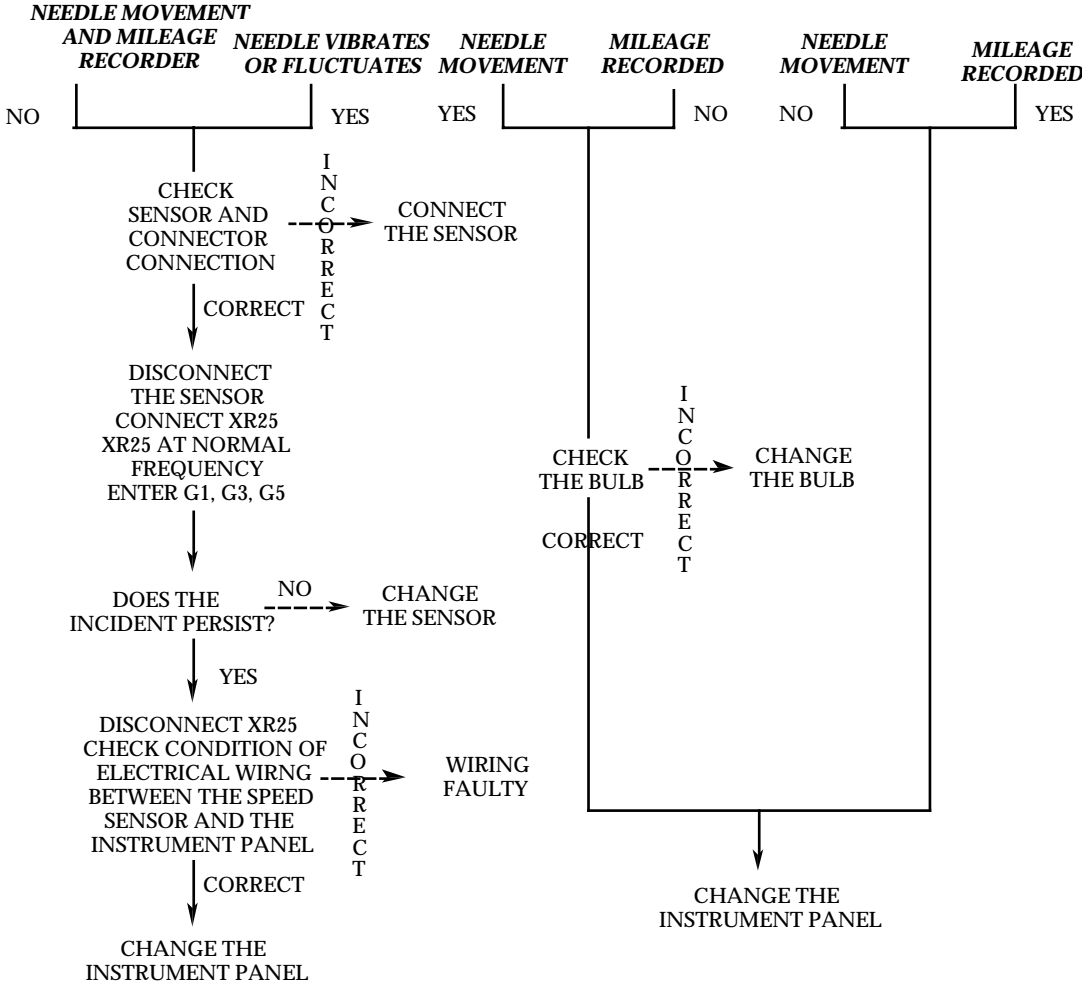
AFTER REPAIR	Adjust the various instrument panel function (clock, etc, ...) if necessary. Check that all the instrument panel functions operate correctly.
--------------	--

AID TO FAULT FINDING NT 2863A

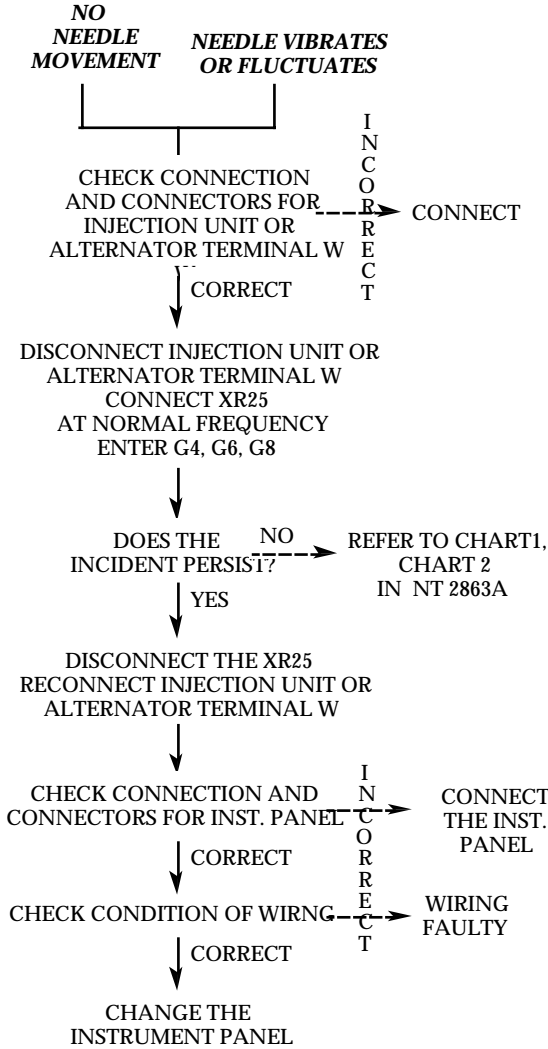
INSTRUCTIONS

Check that the connector for the system are correctly fitted in place.
Take care not to damage the connectors when carrying out the checks.

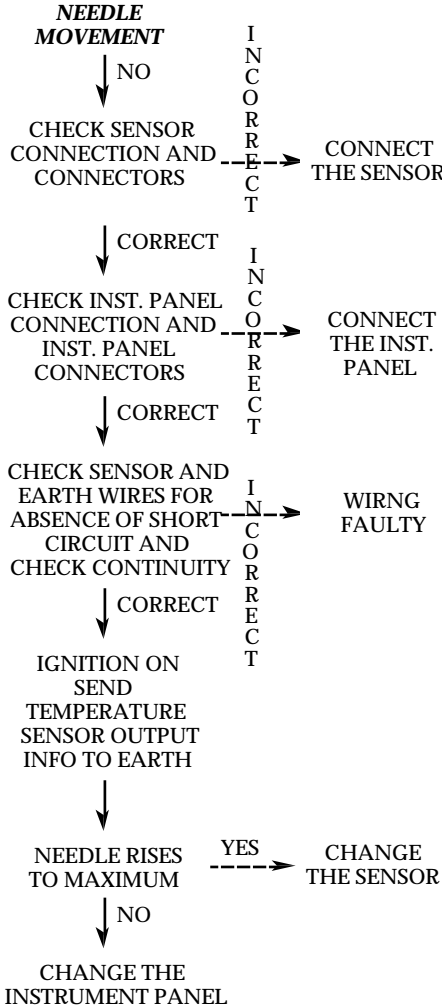
ELECTRIC SPEEDOMETER



REV COUNTER



COOLANT TEMPERATURE

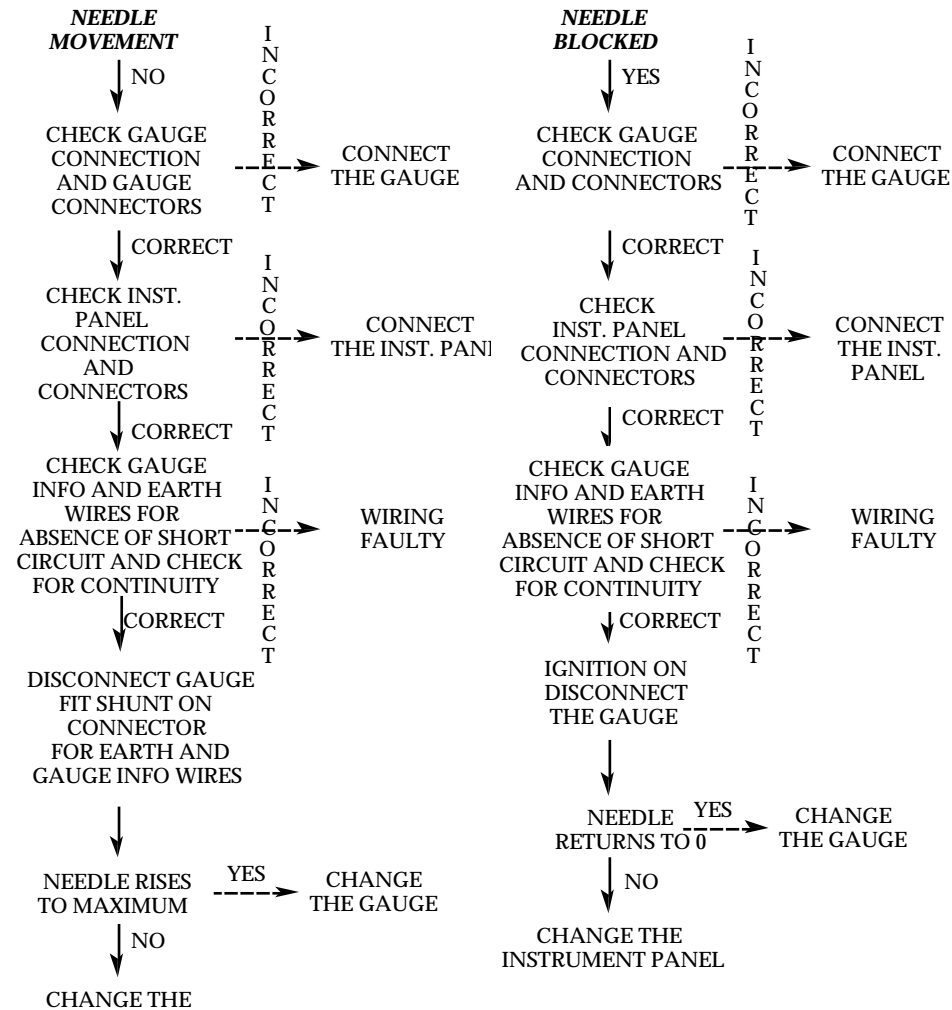


AID TO FAULT FINDING NT 2863A

INSTRUCTIONS

Check that the connector for the system are correctly fitted in place.
Take care not to damage the connectors when carrying out the checks.

FUEL LEVEL NEEDLE



OIL LEVEL / LCD MILEAGE RECORDER

