SETTING UP A DIALOGUE BETWEEN THE XR25 AND THE COMPUTER

- Connect the test kit to the diagnostic socket.
- Ignition on.
- ISO selector on S8
- Type **D13**

9.INJ

COMPUTER IDENTIFICATION

The computer is not identified by reading a fault code but by reading the Part Number directly from the computer. After having set up a dialogue with the computer:

ENTER	G70*	7700
		XXX
		xxx

The Part Number will then appear on the central display in three sequences..

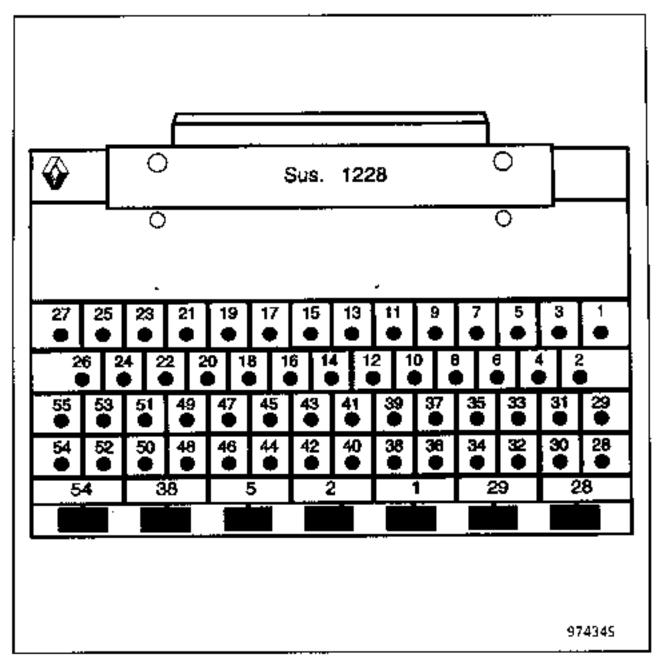
Each sequence is displayed for approximately two seconds. Each sequence is repeated twice. (To find the number, refer to the Workshop Repair Manual, section 12).

ERASING THE MEMORY (engine off, ignition on)

After the injection system has been worked on, the computer's memory can be erased by using the code 60^* * (Erasing memorised faults in diagnostic mode D13, ISO selector in position S8, enter 60^* *).

The memories of other components on the vehicle are not erased when this operation is used.

If information obtained from the XR25 means that electrical continuities have to be checked, connect the bornier **Sus. 1228**.



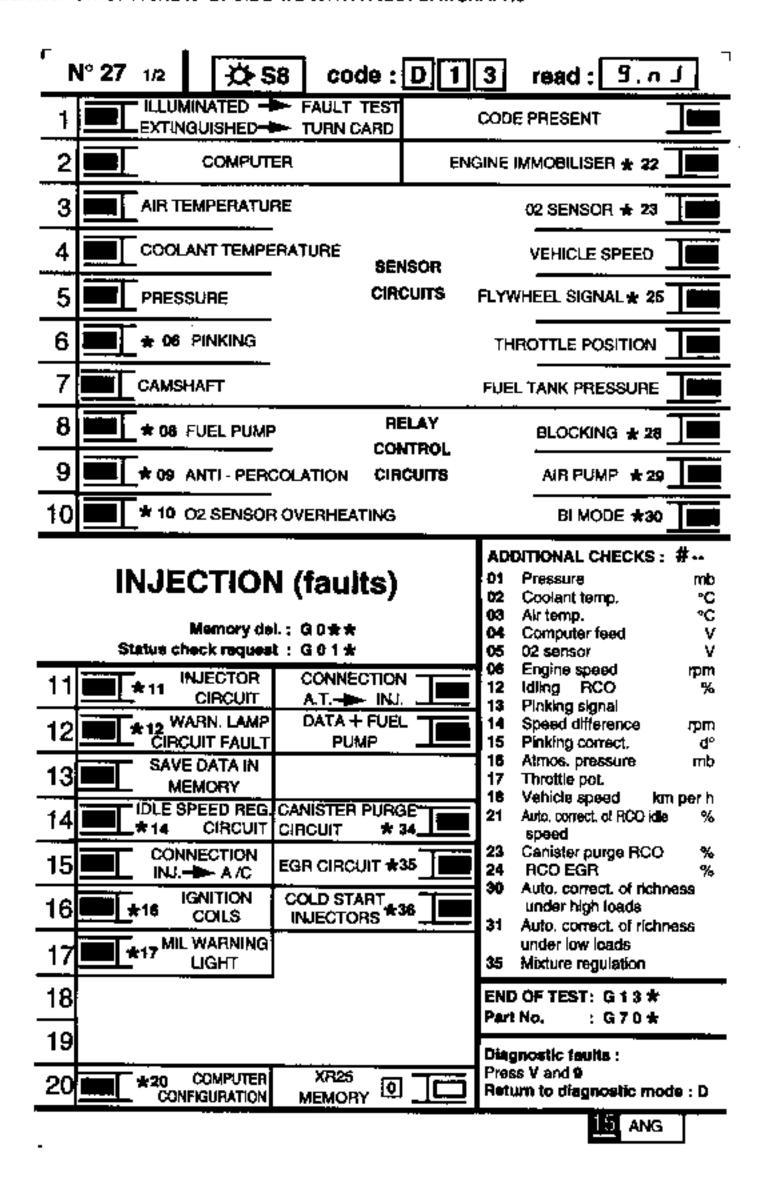
(The Sus. 1228 consists of a 55 track base unit which has an integral printed circuit comprising 55 copper coated areas, numbered from 1 to 55).

Using the wiring diagrams, the tracks connecting the component or components can easily be checked.

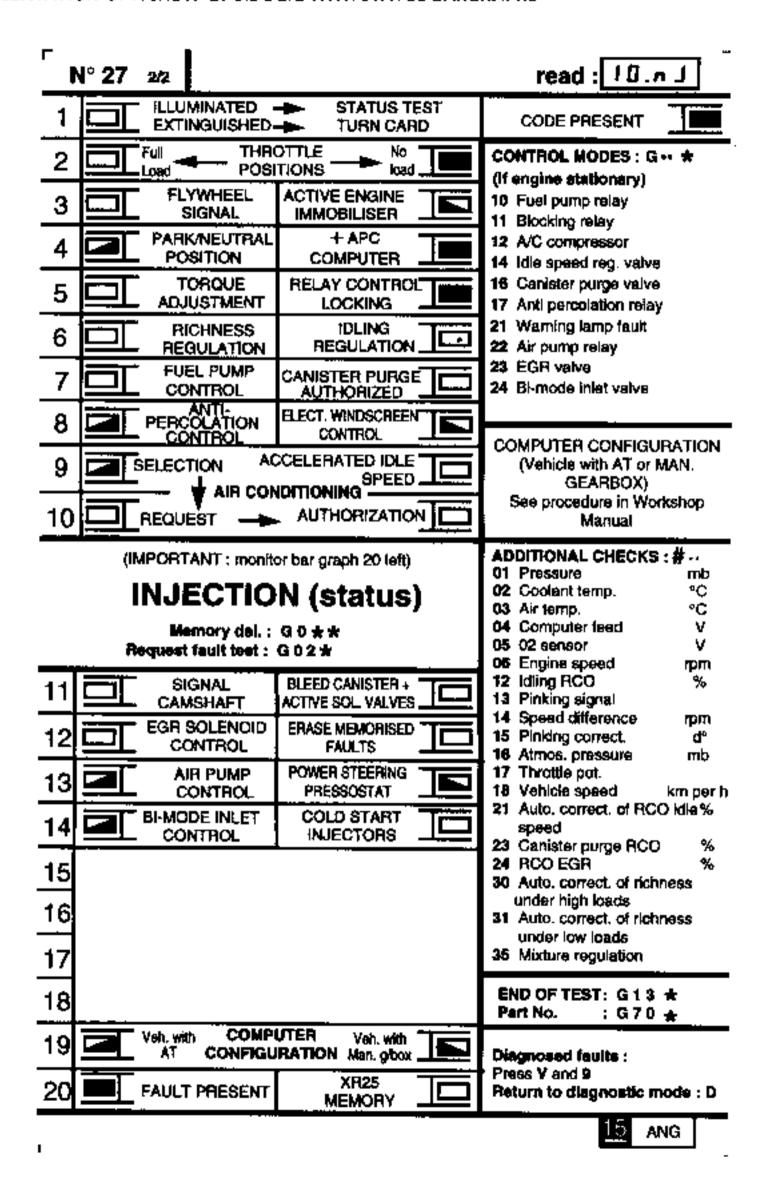
IMPORTANT:

- All checks with the bornier Sus. 1228 should only be performed with the battery disconnected.
- The bornier is designed to work with an ohmmeter only. Under no circumstances should a 12 volts supply be connected to the control points.

PRESENTATION OF FICHE N° 27 SIDE 1/2 WITH FAULT BARGRAPHS



PRESENTATION OF FICHE N° 27 SIDE 2/2 WITH STATUS BARGRAPHS



INJECTION Fault finding - XR25 fiche

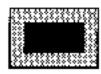
REPRESENTATION OF THE BARGRAPHS



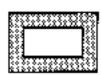
Illuminates when a dialogue has been established with the product computer. If it remains extinguished:

- the code does not exist,
- there is a fault in the tool, the computer or the line.

REPRESENTATION OF THE FAULTS (always on a coloured background)



If illuminated, indicates a fault on the tested product, the associated text defines the fault.



If extinguished, indicates that the fault has not been found on the tested product.

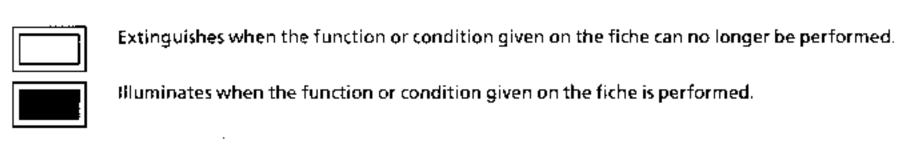
REPRESENTATION OF THE STATUSES (always on a white background)

Engine off, ignition on, no operator action

The status bargraphs on the fiche are represented as the status which they should have when the engine is off, the ignition is on and there is no operator action

- if on the fiche the bargraph is represented as	the test kit should give as information	
- If on the fiche the bargraph is represented as	the test kit should give as information	
- If on the fiche the bargraph is represented as	the test kit should give as information	
either or		

Engine running



FUNCTION V9

Fichein° 27 side 1/2 and side 2/2 is a generic fiche used for several engines.

The different engines do not use all the bargraphs. To find out the bargraphs dealt with by the injection computer, after having set up a dialogue with the computer, press the V and 9 buttons simultaneously. The bargraphs dealt with will:

- illuminate permanently for non memorisable fault bargraphs or status bargraphs,
- flash for memorisable fault bargraphs.

To return to fault finding mode, press button D.

Bargraph 1 RH extinguished

XR25 CIRCUIT

XR25 assistance: no connection, CO, CC EARTH, CC + 12

NOTES

For fault finding, this bargraph should be illuminated

Check:

- all the injection fuses,
- the connection between the XR25 and the diagnostic socket,
- the position of the dia! (\$8),
- the conformity of the cassette.

Repair if necessary.

Check:

- the presence of + 12 V on track 16 and the earth on track 4 on the diagnostic socket.
- the connection between the XR25 and the diagnostic socket.

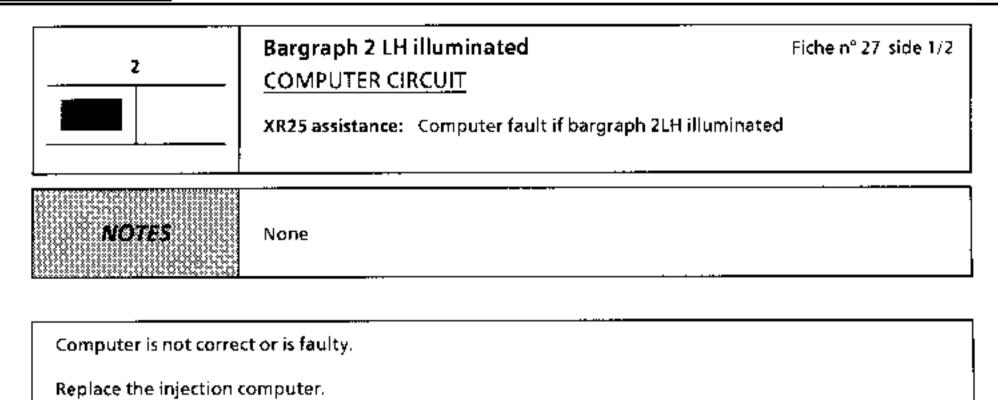
Diagnostic 15 → 4 XR25 socket 7 → 8 socket

Repair if necessary.

Connect the bornier **\$us. 1228** instead of the computer and check the insulation and continuity between the tracks:

38 → 15 Bornier Diagnostic socket Diagnostic socket → 7 2 → earth Earth MH 3 -------> earth Earth MH 24 ---- **→** fuse Engine - after ignition feed fuse Coil 1-4 28 → 3 29 → 3 Coil 2-3 Idle solenoid valve 54 ----- 2

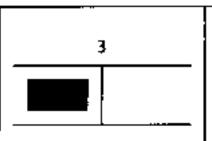
Repair



AFTER REPAIR

2	Bargraph 2 RH illuminated ENGINE IMMOBILISER CIRCUIT	Fiche n° 27 side 1/2
	XR25 assistance: CO or CC + 12 V line 35 of the computer	
NOTES	None	
Connect the bornier S	us. 1228 instead of the computer and check the insulation and	continuity of line:
Bornier	35 5 Decoder unit	
Repair if necessary.		
If the fault persists ref	er to status bargraph 3 RH side	

AFTER REPAIR



Bargraph 3 LH illuminated

Fiche n° 27 side 1/2

AIR TEMPERATURE SENSOR CIRCUIT

XR25 assistance: #03 = -40

CO LINE 20 OR 46 $\, ; \, \, CC = 5V$ LINE 20

#03 = 119

CC EARTH LINE 20 ; CC LINE 46/20

NOTES

If BG3RH; BG4LH; BG6RH; BG12RH are illuminated, refer to BG6RH

If BG6RH is illuminated, refer to BG6RH

Check the resistance of the air temperature sensor.

If the resistance is not correct, replace the air temperature sensor and erase the computer memory using 60^{**} .

Connect the bornier Sus. 1228 instead of the computer and check the insulation and continuity of the electrical wiring between tracks:

1 sensor connector 46 bornier 2 sensor connector 20 bornier

If the electrical wiring is correct, replace the computer.

AFTER REPAIR

3

Bargraph 3 RH illuminated

Fiche n° 27 side 1/2

OXYGEN SENSOR CIRCUIT

XR25 assistance : #35 \pm 128 CO LINE 17 or 18 ; CC - LINE 17 ; CC \pm 12V LINE 17

#05 > 1V CC + 12V LINE 17; #05 \pm 0.390 CO LINE 17 or 18

#05 = 0V CC EARTH LINE 17

NOTES

If BG3LH; BG4LH; BG6RH; BG12RH are illuminated, refer to BG6RH

Check the connection and condition of the oxygen sensor connector.

Engine running, check for -12V between tracks A and B on the oxygen sensor connector.

If there is not + 12V, repair the wiring for the sensor heating circuit.

ignition off, connect bornier Sus. 1228 in place of the computer and check the continuity and insulation of the wiring between tracks:

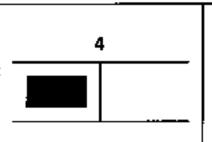
C/17 and C/18 (sensor connector /bornier)

If necessary, repair the wiring.

The fault persists! Replace the oxygen sensor

The fault persists! Replace the computer.

AFTER REPAIR



Bargraph 4 LH illuminated

Fiche n° 27 side 1/2

COOLANT TEMPERATURE SENSOR CIRCUIT

XR25 assistance: $\#02 = -40^{\circ}\text{C}$

CC = 5V LINE 15; CO LINE 15 or 44

#02 == 119°C

CC EARTH LINE 15 ; CC LINE 15/44 or 45/15

NOTES

If BGSLH is illuminated, refer to BG4RH

If BG3LH; BG3RH; BG6RH; BG12RH are illuminated, refer to BG6RH

Check the resistance of the coolant temperature sensor.

The resistance is not correct, replace the sensor.

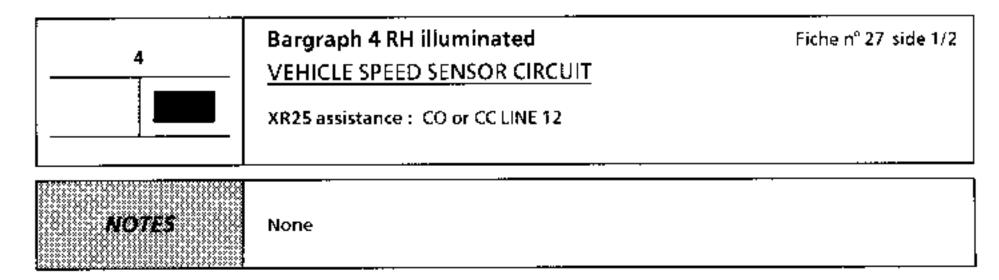
Connect the bornier **Sus. 1228** instead of the computer and check the continuity and the insulation of the electrical wiring between the tracks:

1 coolant temperature sensor
 2 coolant temperature sensor
 5 bornier
 6 pressure sensor
 7 bornier
 8 throttle potentiometer
 45 bornier
 45 bornier

Repair if necessary.

The fault persists! Replace the computer.

AFTER REPAIR



Carry out a road test and check the speed on the speedometer.

If the speed is zero, repair the wiring of track 12 of the computer and B of the sensor.

Check the connection and the feed of the speed sensor:

+ 12V on track A earth on track C

Repair if necessary.

The fault persists! Replace the speed sensor.

AFTER REPAIR

Erase the computer memory using G0** Carry out a road test Carry out a conformity check

5

Bargraph 5 LH illuminated

Fiche n° 27 side 1/2

ABSOLUTE PRESSURE SENSOR CIRCUIT

XR25 assistance: #01 = 103 mb CO LINE 16 or LINE 44 or LINE 45;

CC EARTH LINE 16

#01 = 928 mb CO LINE 44

NOTES

If BG4LH is illuminated, refer to BG4LH If BG6RH is illuminated, refer to BG6RH

Check the pressure sensor is electrically and pneumatically connected.

Ignition on, check that there is $\pm\,$ 5V between track C and earth on track A.

There is not + 5V between track C and track A

Connect the bornier Sus. 1228 instead of the computer and check the insulation and continuity between the tracks:

A sensor connector 44 bornier C sensor connector 45 bornier

Repair if necessary.

There is not + 5V! The fault persists! Replace the computer.

There is +5V between track C and track A

Ignition on, check the return voltage (0.2 to 5 V) on track B of the sensor.

Note: For this measurement, a vacuum pump can be used to check the voltage variation.

If the voltage does not vary, replace the sensor.

The voltage varies

Connect the bornier Sus. 1228 instead of the computer and check the insulation and the continuity between track B of the sensor and 16 of the bornier.

Repair if necessary.

The fault persists! Replace the computer.

AFTER REPAIR

F3R engine

INJECTION Fault finding - Interpretation of XR25 bargraphs

17

5

Bargraph 5 RH illuminated

Fiche nº 27 side 1/2

FLYWHEEL SIGNAL CIRCUIT

XR25 assistance: *25 = CO

CO or CC EARTH LINE 33 or 34

*25 = CC.O

INTERFERENCE

*25 = [n]

SENSOR WIRE INVERTED

NOTES

None

Disconnect the sensor connector and check the resistance of the sensor between terminals. A and B.

The resistance is not 200 \pm 50 ohms. Replace the sensor.

The resistance is 200 ohms.

Connect the bornier Sus. 1228 instead of the computer and check the continuity and the insulation of the wiring between the tracks:

A sensor 34 bornier

B sensor

33 bornier

Repair if necessary.

The fault persists! Replace the computer.

AFTER REPAIR

6

Bargraph 6 LH illuminated

Fiche n° 27 side 1/2

PINKING SENSOR CIRCUIT

XR25 assistance : #13 = 0 CC EARTH LINE 8 or CO LINE 8 and 44

NOTES

None

Check the wiring of the faulty sensor.

Repair if necessary.

Connect the bornier Sus. 1228 instead of the computer and check the insulation and the continuity of the electrical wiring between the tracks:

1 sensor

44 bornier

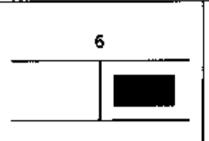
2 sensor

8 bornier

Repair if necessary.

The fault persists! Replace the pinking sensor.

AFTER REPAIR



Bargraph 6 RH illuminated

Fiche n° 27 side 1/2

THROTTLE POTENTIOMETER CIRCUIT

XR25 assistance: #17 = 0 CO LINE 45 or 19 or CC EARTH LINE 19 or 45

#17 = 255 CO LINE 46 or CC LINE 19/45

NOTES

If BG3LH is illuminated, refer to BG6RH If BG20RH is illuminated, refer to BG6RH If BG5LH is illuminated, refer to BG6RH

If BG3LH; BG3RH; BG4LH; BG12RH are illuminated, refer to BG6RH

Check the resistance of the throttle potentiometer between tracks A and B ($R > 4000 \ \text{ohms}$).

Check the variation of the throttle potentiometer between tracks B and C.

A-B < 4000 ohms or B-C does not vary. Replace the throttle potentiometer.

A-B > 4000 ohms and B-C varies.

Connect the bornier Sus. 1228 instead of the computer and check the insulation and the continuity between tracks:

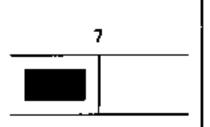
A potentiometer 46 bornier B potentiometer 45 bornier C potentiometer 19 bornier

Repair if necessary.

The fault persists! Replace the computer.

AFTER REPAIR

Fiche nº 27 side 1/2



Bargraph 7 LH illuminated

CAMSHAFT SENSOR CIRCUIT

XR25 assistance: CO or CC EARTH LINE 42

CC + 12V LINE 48 CC LINE 52/2

NOTES

If BG8LH is illuminated, refer to BG8LH
If the vehicle does not start, refer to BG8LH

Engine running, check for the presence of 12V on terminal 3 of the sensor and the earth on terminal 1 of the sensor.

Repair if necessary.

Exit fault finding.

Connect a cable to terminal Vin and enter G on the XR25.

Engine running, check for the presence of a frequency by connecting to terminal 2 of the camshaft sensor connector which is still connected.

Enter V on the XR25 to measure the voltage.

There is no frequency or voltage at terminal 2. Replace the sensor.

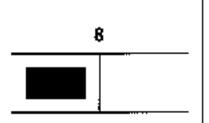
There is a frequency or voltage at terminal 2.

Connect the bornier Sus. 1228 instead of the computer and check the continuity of line 42 bornier / 2 sensor and the insulation of this line from terminal 52 on the computer, earth and + 12 Volts.

Repair if necessary.

The fault persists! Replace the computer.

AFTER REPAIR



Bargraph 8 LH illuminated

Fiche n° 27 side 1/2

FUEL PUMP RELAY COMMAND CIRCUIT

XR25 assistance:

*08 = CO.O CO or CC EARTH LINE 48

*08 = CC.1 CC + 12V LINE 48
*08 = Def MEMORISED FAULT

NOTES

If BG7LH is illuminated, refer to BG8LH

Check the impact sensor is correctly clipped in.

On the fuel pump relay, check for \pm 12V between tracks 1 and 2, during the timed phase when the ignition is turned on.

If there is + 12V between 1 and 2, replace the relay.

If there is not -12V between 1 and 2, ignition on, check for +12V on track 1 of the fuel pump relay.

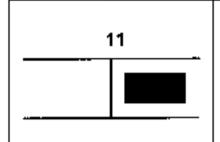
If there is not + 12V on track 1, check the line of track 1 to the fuse.

If there is + 12V on track 1, connect bornier **Sus. 1228** instead of the computer and check the continuity and insulation between track 2 of the relay and track 48 of the bornier.

Repair if necessary.

The fault persists! Replace the injection computer.

AFTER REPAIR



Bargraph 11 RH illuminated

Fiche n° 27 side 1/2

<u>AUTOMATIC TRANSMISSION --- > INJECTION COMPUTER CONNECTION</u>

XR25 assistance:

BG 11RH illuminated if there is a connection fault

with the automatic transmission

NOTES

Only if automatic transmission

Connect the bornier **5us. 1228** in place of the injection computer, and check the insulation and continuity of computer line 7.

Repair.

If the fault persists, refer to automatic transmission fault finding section.

AFTER REPAIR

Renaulf Meganic Scenic 1996 2002 Fuel System Service Manual

INJECTION

Full download: http://manualplace.com/download/renault-megane-scenic-1996-2002 quel-system-service-manual/

11

Bargraph 11 LH illuminated

Fiche n° 27 side 1/2

INJECTION CIRCUIT

XR25 assistance: *11 = X.CO.O CO or CC EARTH LINE 53 or 25 or 4 or 30

*11 = X.CC.1 CC + 12V LINE 53 or 25 or 4 or 30

MEMORISED FAULT *11 = Def

NOTES

X represents the cylinder N°.

Starter motor operating, bargraph illuminates for 10 seconds.

Check the resistance of each injector.

The resistance is not correct. Replace the faulty injector(s).

The resistance is correct

Connect the bornier Sus. 1228 instead of the computer and check the continuity and insulation between the injector connectors on track 2 and tracks 53, 25, 4 and 30.

Repair the wiring if necessary.

The fault persists! Replace the computer.

AFTER REPAIR