# RENAULT

## **Technical Note 3729A**

Vehicle	Туре
Clio II	XB0X
Mégane	XAXX
Scénic	JAXX
Laguna	XG0X
Avantime	DE0X
Trafic	XLXX
Mégane II	XMXX
Scénic II	JMXX
Vel Satis	BJ0X
Espace IV	JK0X

## Navigation Assistance CARMINAT and INFO TRAFIC "High-end"

#### This note cancels and replaces Technical Note 3543A

77 11 321 002

#### FEBRUARY 2003

#### **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 introduced 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 2003

#### Contents

Page

## 83C ON BOARD TELEMATIC SYSTEM

Operation	83C-1
System description	83C-5
Central Communications Unit	83C-7
Console	83C-16
Navigation CD-ROM reader	83C-18
Screen	83C-27
Aerial	83C-44
Speaker	83C-49
Initialisation	83C-52
Upgrading the Navigation CD-ROM	
software	83C-53
Changing the language	83C-54
Relocation	83C-56
Navigation menus	83C-57
Customer complaints	83C-59
Fault finding charts	83C-60
Fault finding log	83C-87



#### WARNING

With this type of navigation system, it is absolutely essential to wait for the system to shut down completely (approximately **1 minute**) before disconnecting the battery.

The **CARMINAT** system comprises a screen and a voice synthesiser to provide guidance for the driver.

This system can:

- find a specific location, such as:
  - a road, street or avenue,
  - a hotel,
  - public services,
  - a garage or petrol station.
  - etc.
- select guidance modes in order to:
  - optimise journey time,
  - select the shortest distance,
  - plan a route travelling on main roads,
  - or take the scenic route,
  - avoid tolls.

Each mode is symbolised by a different icon that appears on the state line on the lower part of the screen.

- store addresses in the address book.
- display road maps of:
  - the present location,
  - or the destination,
- display trip or arrival time (see Screen).
- receive written or spoken messages from the **traffic information** system.

Note:

For information on operating the system and descriptions of the various menus, see the system user's manual.

The Carminat system uses the **Vehicle speed** signal provided by the ABS computer to calculate the distance travelled along with the **Reversing** signal.

A special multiplex network for the **"Carminat"** function connects the navigation computer, Central Communications Unit and screen, Central Display Unit and radio (depending on the vehicle's equipment).

- This system uses the following to function:
- a Central Communication Unit (UCC),
- a keyboard (integrated/not integrated into the Central Communication Unit),
- an electronic navigation computer comprising acceleration sensors (gyroscope) and the navigation CD-ROM reader,
- a satellite link (satellite aerial) allowing the vehicle to be located,
- a screen to display written data and maps,
- a speaker for giving voice instructions,
- a CD ROM with the maps of the country the vehicle is delivered to,
- an FM aerial for traffic information messages.
- a Central Display Unit (Mégane II).

#### NOTE:

- If the vehicle ignition was switched off, it may take the navigation system a few minutes to determine its exact position (see the **Relocation**) section.
- If the vehicle battery has been disconnected, the system may need up to **20 minutes** to calculate its exact location. The vehicle must therefore be outdoors (with the system running) to pick up the satellite signals with the satellite aerial.
- The system can also operate without valid satellite data. Under these circumstances, there may be a loss of precision in pinpointing exact locations.
- Once the exact position has been located by the satellite system, the on-screen satellite symbol turns from red to green.
- When traveling on the motorway, the distance data provided by the system to indicate exits will differ from the information on the signs. This is because motorway signs calculate distance from the start of the motorway exit, while the CARMINAT system calculates from the end of the exit.



## BASIC PRINCIPLES OF THE TRAFFIC INFORMATION SERVICE

In conjunction with navigation, the system uses information on traffic conditions: **TMC: Trafic Message Channel**.

The system uses:

- the navigation computer which receives, locates and recognises the information received,
- the TMC locators on the cartographic CD-ROM,
- the information collected and disseminated (by public authorities) in RDS - TMC format (communications protocol).

#### IMPORTANT

RENAULT is not responsible for the information collection and dissemination services in Europe, which are still in development.



Note:

To work, the Navigation CD-ROM software version must be higher than 2000-1.

#### Traffic information terminal processing reminder:

TMC pictogram display logic:

- $\Rightarrow$  red = no traffic information available in this geographic area or poor reception,
- ⇒ black = no traffic information locators on the CD-ROM,
- ⇒ **green** = the system is locked onto a frequency that can supply traffic information.

The term **TMC** is replaced by the name of the service operator that the system has locked onto (if the operator uses a name).

The system can display in either text or pictogram form. It suggests a detour if a fault is located on the proposed itinerary.

- The level of disruption is indicated by a "**&Delta**" pictogram.
  - $\Rightarrow$  green = disruption with detour,
  - $\Rightarrow$  **rouge** = disruption without a detour,
  - ⇒ red (full) = very serious disruption within a 31-mile (50-km) radius.



#### **EXAMPLES OF TRAFFIC INFORMATION PICTOGRAMS**



- 1 Accident
- 2 Traffic jam
- 3 Slippery conditions
- 4 Strong winds
- 5 Slow traffic
- 6 Fog
- 7 Road works
- 8 Danger
- 9 Parking possible
- 10 Bad weather
- 11 Slow traffic
- 12 Traffic problems in both directions
- 13 Road partially closed or narrowed
- 14 Vehicle travelling in the opposite direction
- 15 Restricted speed
- 16 Vehicle breakdown

## ON-BOARD TELEMATICS SYSTEM Operating principle



	Map CD-ROM that covers the country	"Spring/ summer 2002" version (2002-B)	"Fall 2002/Winter 2003" version (2003-A)	"Spring/summer 2003" version (2003-B)	TMC locator table finding software version <sup>(2)</sup>
France	France <sup>(1)</sup>	yes	yes	yes	2000-1
Germany	Deutschland <sup>(1)</sup>	yes (100%)	yes (100%)	yes (100%)	1999-1
Great Britain	UK/Irish Republic	yes (100%)	yes (100%)	yes (100%)	Not applicable
Ireland	UK/Irish Republic	start	yes	yes	Not applicable
SWITZERLAND	Switzerland/ Osterreich	yes	yes (100%)	yes	2001-a
Austria	Switzerland/ Osterreich	yes	yes	yes (100%)	Fall/Winter 2001
Holland	Benelux	yes (100%)	yes (100%)	yes (100%)	1999-1
Spain	Espana/Portugal	yes	yes	yes	Fall/Winter 2001
Italy	Italy <sup>(1)</sup>	yes	yes	yes	2000-1
Belgium	Benelux	yes	yes	yes (100%)	1999-1
Luxembourg	Benelux	yes	yes	yes (100%)	Not applicable
Portugal	Espana/Portugal	yes	yes	yes	Not applicable
Sweden	Sweden/ Denmark	yes	yes	yes (100%)	Spring/Summer 2002
Denmark	Sweden/ Denmark	yes	yes	yes (100%)	Spring/Summer 2002
Finland	Scandinavia	no	no	start (Helsinki, Tampere)	Not applicable
Norway	Scandinavia	no	no	Akershus and Østfold	Not applicable
Czech Republic	Switzerland/ Osterreich	no	start (Prague + main roads)	2003-A + (Brno, Plzen, Ostrava, Karlovy Vary)	Not applicable
Slovakia	Switzerland/ Osterreich	no	no	start (Bratislava and main roads)	Not applicable
Poland		no	no	no	Not applicable
Hungary		no	no	no	Not applicable

<sup>(1)</sup> The France/Germany/Italy border zones are available on the "Switzerland/Osterreich" CD-ROM.

<sup>2 ()</sup> The TMC locator tables enable drivers to receive traffic information if it is broadcast in the country concerned (more specifically, they enable the broadcast events to be located on the map).



#### DIAGRAM

- 1 Central Communications Unit
- 2 Keyboard
- 3 Carminat computer (CD-ROM reader)
- 4 Screen
- 5 Seat belt information (for display)
- 6 External temperature information (for display)
- 7 Radio
- 8 Voice synthesiser speaker
- 9 Steering wheel radio control
- 10 Radio aerial
- 11 Radio connection (mute)
- 12 Vehicle's multiplex connection
- 13 Satellite aerial





#### WARNING

When replacing a navigation system component, it is essential to check that the software is compatible with the navigation CD-ROM reader, the Central Communications Unit, and the languages CD-ROM.

System software version	Central Communications Unit version read from menus	Navigation CD- ROM reader version read from menus	Languages CD-ROM	Application	Notes on Changes
2 "A" SECOND LABEL	2.4	nav: 0182 csb: 1.80 or 1.82	2.5 <sup>(1)</sup>	03/2001	-
2 TER <sup>(2)</sup>		nav: 0196 csb: 1.80 or 1.82	2.5 <sup>(1)</sup>	01/2003	<ul> <li>new traffic information messages</li> </ul>
3	3.63	nav: 0304 csb: 3.00	3.0 <sup>(1)</sup>	01/2002	<ul> <li>alternative route suggestion</li> <li>new rotary knob functions</li> </ul>
3 "A" SECOND LABEL	3.67	nav: 0350 csb: 3.00 or 3.01	3.5 <sup>(1)</sup>	-	-
3 TER	-	never used	-	-	-
3 QUATTRO <sup>(2)</sup>	3.67	nav: 0376 csb: 3.00 or 3.01	All versions CD-ROM	01/2003	<ul> <li>new traffic information messages</li> </ul>
4	4.51	nav: 0434 csb: 4.31 or 4.32	4.0 <sup>(1)</sup>	10/2002	<ul> <li>screen watch</li> </ul>
4 BIS <sup>(2)</sup>	4.60	nav: 0457 csb: 4.31 or 4.32	All versions CD-ROM	02/2003	<ul> <li>new traffic information messages</li> </ul>
4 TER	-	-	-	04/2003	<ul> <li>restricted access</li> </ul>

<sup>(1)</sup> "NAV5 Languages All Versions CD" compatible.

<sup>(2)</sup> Software upgrade using the "NAV5 Languages All Versions CD".



Depending on the vehicle, the Central Communications Unit may have a keyboard.



21115

The Central Communication Unit can:

- adjust the clock,
- act as a go-between for the vehicle's multiplex network and the Carminat system network,
- use multiplex data (depending on the vehicle),
- select commands with the radio knob or keyboard (depending on the vehicle equipment),
- control braking conditions, and the vehicle and system configurations,
- control the screen display (with the navigation CD-ROM reader),
- receive written or spoken messages from the traffic information system (via the aerial)
- manage voice synthesiser and navigation messages,
- transfer data from the radio for display.

## ON-BOARD TELEMATICS SYSTEM Central Communications Unit

#### CONNECTIONS



#### 15-track connector (A) (red):

Track	Description
1	Not used
2	Not used
3	Not used
4	Not used
5	Not used
6	Not used
7	Not used
8	Not used
9	Radio control satellite
10	Radio control satellite
11	Radio control satellite
12	Radio control satellite
13	Radio control satellite
14	Radio control satellite
15	Not used

#### 30-track connector (B) (grey):

Track	Description
1	Not used
2	Aerial amplifier output
3	Multiplex connection (multimedia)
4	Multiplex connection (multimedia)
5	Multiplex connection (multimedia)
6	Multiplex connection (multimedia)
7	Computer on-off output
8	Computer audio link
9	Computer audio link
10	Not used
11	Not used
12	Not used
13	Not used
14	Not used
15	Not used
16	Exterior temperature signal (input)
17	Exterior temperature signal (input)
18	Not used
19	Vehicle speed input (except multiplex
	vehicle)
20	Reverse gear input (except multiplex
	vehicle)
21	External temperature output
22	Not used
23	Not used
24	Seat belt warning light
25	+ Lighting
26	Radio display (low-end)
27	Radio ON/OFF
28	Radio display (low-end)
29	Radio display (low-end)
30	Radio display (low-end)

83C

## ON-BOARD TELEMATICS SYSTEM Central Communications Unit





(D) and (E): radio aerial input and output

12-track connector (keyboard removed):

Track	Description
1	Left rotary knob
2	+ Lighting
3	Push-button
4	Push-button
5	Keyboard earth
6	Confirmation switch
7	Right rotary knob
8	+ rotary knob
9	Rotary knob earth
10	Keyboard earth
11	Push-button
12	Push-button

#### 30-track connector C (green):

Track	Description
1	Not used
2	Not used
3	Not used
4	Not used
5	Not used
6	Multiplex connection (vehicle)
7	Multiplex connection (vehicle)
8	Not used
9	+ accessories
10	+ before ignition
11	Radio mute control
12	Earth
13	+ After ignition (except multiplexed
	vehicle)
14	Voice synthesiser computer
15	Voice synthesiser computer
16	Not used
17	Not used
18	Not used
19	Not used
20	Not used
21	Not used
22	Speaker output
23	Speaker output
24	Not used
25	Not used
26	Not used
27	Not used
28	Not used
29	Not used
30	Not used



#### CLIO II

#### REMOVAL

The Central Communication Unit is located underneath the front right-hand seat.

#### WARNING

Wait until the system has shut down completely (**1 minute**) before disconnecting the battery.

Note: It is not necessary to remove the seat.

Move the seat as far back as possible.

Remove the rear mounting bolt on the support and raise the rear section.



Disconnect the connectors and remove the assembly.

Remove the Central Communications Unit using the radio removal tools (Ms. 1373).



#### REFITTING

Position the Central Communications Unit in its mounting.

Connect the connectors.

Insert the front mounting guides into their housings.

Position the mounting and the mounting bolts.



#### MEGANE - SCENIC - SCENIC II

#### REMOVAL

#### WARNING

Wait until the system has shut down completely (**1 minute**) before disconnecting the battery.

The Central Communication Unit is located in the luggage compartment, above the CD ROM reader, behind the cover.

#### Special notes on the Mégane

Remove the cover mounting bolts (1).

Remove the cover.



Remove the Central Communications Unit using the radio removal tools (Ms. 1373).



#### Special notes on the Scénic and Scénic II

The Central Communication Unit is located underneath the front right-hand seat.



Note: It is not necessary to remove the seat.



#### REFITTING

83

C

#### MEGANE II

#### REMOVAL

The Central Communications Unit is installed in the dashboard. It incorporates the keyboard.

#### WARNING

Wait until the system has shut down completely (**1 minute**) before disconnecting the battery.

Remove the Central Communications Unit using the radio removal tools (Ms. 1373).



Disconnect the connectors and remove the assembly.

#### REFITTING

Connect the connectors.

Insert the guides into their positions.

Position the Central Communications Unit in its mounting.



#### LAGUNA II - TRAFIC II - AVANTIME

#### **REMOVAL - REFITTING**

#### WARNING

Wait until the system has shut down completely (**1 minute**) before disconnecting the battery.

The Central Communication Unit is removed with the radio removal tools (Ms. 1373).

After refitting, initialise the system (refer to the **Initialisation** section).

#### Special notes on the Laguna II

The Central Communication Unit (1) is located above the radio or CD ROM reader.



#### Special notes on the Trafic II

The Central Communication Unit is located above the radio.



#### Special notes on the Avantime

The Central Communication Unit is located at the front of the dashboard above the CD changer.





#### VEL SATIS

#### REMOVAL

The Central Communication Unit is located behind the cover, under the radio or CD changer.

#### WARNING

Wait until the system has shut down completely (**1 minute**) before disconnecting the battery.

Removal is carried out using tool Ms. 1373.



#### REFITTING



#### ESPACE IV

#### REMOVAL

The Central Communications Unit is located in the front left glovebox.

Removal is carried out using tool Ms. 1373.



#### REFITTING



The keyboard may be integrated into the Central Communication Unit or independent, depending on the vehicle.

It comprises:

- a rotary knob (A) for:
  - navigating the various menus,
  - confirming,
- a navigation cell (B) for:
  - scrolling through the menu in manual mode,
  - select options in the different menus,
- a menu button (**M**) (depending on the vehicle) for returning to the main menu,
- a button (I) for replaying voice messages,
- a button (C) for turning off voice messages,
- buttons (+) and (-) which increase and reduce the volume of audio messages.







#### ESPACE IV - CLIO II - MEGANE - SCENIC - SCENIC II

The independent keyboard is connected to the Central Communication Unit by a special **12-track** connector.

Note:

Only the feeds and earths can be checked.

#### CONNECTION

#### Special notes on Clio II, Scénic II and Espace IV



Track	Description
1	Rotary knob at left
2	+ Lighting
3	Push-button
4	Push-button
5	Keyboard earth
6	Confirmation switch
7	Rotary knob at right
8	+ rotary knob
9	Rotary knob earth
10	Keyboard earth
11	Push-button
12	Push-button

#### Special notes on the Mégane and Scénic

The keyboard is clipped below the screen.

It is necessary to remove the upper section of the dashboard and the screen to reach the connector.



Track	Description
A1	Rotary knob
A2	Rotary knob
A3	Rotary knob
A4	Rotary knob
A5	Not used
A6	Not used
A7	Not used
A8	Keyboard keys
A9	Keyboard keys
B1	Keyboard keys
B2	Keyboard keys
B3	Keyboard lighting supply
B4	Keyboard lighting earth
B5	Not used
B6	Not used
B7	Not used
B8	Not used
B9	Not used



The navigation CD-ROM reader works by using sensors that detect vehicular motion. The car's tachometric (or ABS) sensor calculates the distance travelled while the gyroscope registers turns.

By making comparisons with the digital map (on the CD-ROM), the system corrects inaccuracies (tyre pressure and wear, temperature etc.) to pinpoint the vehicle's location.

#### IMPORTANT

If the battery has been disconnected or the navigation computer replaced, relocation of the vehicle is automatic (refer to the **Relocation** section).

The system will be programmed in French by default after the navigation CD-ROM reader has been replaced.

To change language, see Language Settings.

#### WARNING

When the navigation CD-ROM reader is replaced, the addresses stored in the old unit cannot be recovered.

#### Note:

- With the ignition off, the CD-ROM player lights up automatically when the eject button is pressed and will remain lit for about **1 minute** (if the ignition is not switched back on).
- The player lights up automatically when the ignition is turned on.
- After the ignition is turned off, it remains lit for approximately 1 minute, during which time the battery must not be disconnected.
- The navigation CD-ROM readers differ, depending on whether installed horizontally or vertically.

## ON-BOARD TELEMATICS SYSTEM Navigation CD-ROM reader



#### CONNECTIONS



(1) Satellite aerial connection

18-track connector (2) to the vehicle:

Track	Description
1	+ Before ignition
2	Not used
3	Central Communication Unit audio link
4	Not used
5	Not used
6	Computer on-off input
7	Not used
8	Not used
9	Multiplex connection (multimedia)
10	Earth
11	Not used
12	Central Communication Unit audio link
13	Not used
14	Not used
15	Vehicle speed signal
16	Not used
17	Not used
18	Multiplex connection (multimedia)

#### 16-track connector (3) to the display:

Track	Description
1	Not used
2	Earth
3	- Video signal
4	Red video signal
5	Green video signal
6	Blue video signal
7	Earth
8	Video synchronisation signal
9	Earth
10	Brightness adjustment
11	Not used
12	Screen on/off
13	Not used
14	Not used
15	+ Before ignition
16	+ Before ignition



#### CLIO II - TRAFIC II

#### **REMOVAL - REFITTING**

#### WARNING

Wait until the system has shut down completely (**1 minute**) before disconnecting the battery.

#### WARNING

The **satellite** aerial wire is very fragile. Do not bend or trap it.

After refitting, initialise the system (refer to the **Initialisation** section).

#### Special notes for Clio II

The navigation CD-ROM reader is in the luggage compartment (left side).

It is removed with the radio removal tools (Ms. 1373).



#### Special notes on the Trafic II

The navigation CD-ROM reader is in the lower section of the dashboard.

It is removed with the radio removal tools (Ms. 1373).





#### SCENIC

#### REMOVAL

The navigation CD-ROM reader is under the Central Communications Unit below the right front seat.

#### WARNING

Wait until the system has shut down completely (**1 minute**) before disconnecting the battery.

Note:

It is not necessary to remove the seat.

Move the seat as far back as possible.

Remove the compartment mounting bolts and unclip it.



Pull the assembly forwards and disconnect the connectors.

#### WARNING

The **satellite** aerial wire is very fragile. Do not bend or trap it.

#### Remove:

- both support mounting bolts on the casing.



Remove:

- the computer using tools Ms. 1373.



#### REFITTING

Proceed in the reverse order to removal.

After refitting, initialise the system (refer to the **Initialisation** section).

## ON-BOARD TELEMATICS SYSTEM Navigation CD-ROM reader



#### **MEGANE II**

#### WARNING

Wait until the system has shut down completely (**1 minute**) before disconnecting the battery.

#### REMOVAL

The navigation CD-ROM reader is located in the luggage compartment, next to the amplifier, behind the cover.

Remove the cover clipped to the carpet.



Remove the CD-ROM reader with the radio removal tools (Ms. 1373)



Disconnect the connectors and remove the assembly.

#### WARNING

The **satellite** aerial wire is very fragile. Do not bend or trap it.

#### REFITTING

Insert the guides into their positions.

Connect the connectors.

Place the navigation CD-ROM reader in its mounting.



#### LAGUNA II

#### REMOVAL

#### WARNING

Wait until the system has completely shut down (**1 minute**) before disconnecting the battery.

Remove:

- the glove compartment cover secured by a screw,
- the computer support mounting bolts.

Disconnect the navigation CD-ROM reader connectors and lower the unit.



Detach the support from the computer using the radio removal tools (Ms. 1373).



#### WARNING

The **satellite** aerial wire is very fragile. Do not bend or trap it.

#### REFITTING

Proceed in the reverse order to removal.

After refitting, initialise the system (refer to the **Initialisation** section).



#### MEGANE - AVANTIME - SCENIC II

#### **REMOVAL - REFITTING**

#### WARNING

Wait until the system has completely shut down (**1 minute**) before disconnecting the battery.

#### WARNING

The **satellite** aerial wire is very fragile. Do not bend or trap it.

After refitting, initialise the system (refer to the **Initialisation** section).

#### Special notes on the Mégane

The navigation CD-ROM reader is in the luggage compartment (left side).

It is removed with the radio removal tools (Ms. 1373).



#### Special notes on the Avantime

The navigation CD-ROM reader is located in the glovebox (passenger's side).

It is removed with the radio removal tools (Ms. 1373).



#### Special notes on the Scénic II

The navigation CD-ROM reader is located underneath the right front seat.

It is removed with the radio removal tools (Ms. 1373).



Note: It is not necessary to remove the seat.

83C



#### REMOVAL

The navigation CD-ROM reader is located in the glovebox.

#### WARNING

Wait until the system has completely shut down (**1 minute**) before disconnecting the battery.

Removal is carried out using tool Ms. 1373.



#### REFITTING

83C

#### ESPACE IV

#### REMOVAL

The navigation CD-ROM reader is located in the glovebox.

Removal is carried out using tool Ms. 1373.



#### REFITTING



The screen can display:

- the various menus,
- the destination direction,
- the distance from the destination,
- the journey maps,
- the distance remaining until the next change of direction,
- the road maps,
- etc.

It lights up a few seconds after +accessories is switched on or the radio is switched on and displays the security message.

It goes out approximately **45 seconds** after the ignition is switched off.

#### Note:

The screen colour and brightness can be adjusted using the **Screen configuration** menu:

- daytime blue or dark blue (side lights).
- night time blue or dark blue (side lights on).



- 1 Time
- 2 External temperature
- 3 Traffic Information message pictogram
- 4 Time of arrival or journey remaining (can be configured)
- 5 Guidance mode pictogram
- 6 Disc present pictogram
- 7 Satellite reception quality pictogram
- 8 Radio display (depending on the vehicle)
- 9 Tyre pressure monitor and opening elements (depending on the vehicle)

**Special notes on the radio** (depending on the vehicle)

If the vehicle is fitted with an original radio, the display will appear on the screen bar (radio on only).

When the radio is being adjusted, the radio display fills the screen (for greater visibility) in **list** or **preset** mode.

Note:

If the radio information does not appear on screen, refer to the "**Initialisation**" section.

#### Special notes on the clock

The clock is connected to the satellite link (GPS). The reference time is adjusted manually via the **Clock** menu, but the satellite connection allows precise adjustment.

#### WARNING

Do not use cleaning products to clean the screen. It should be wiped with a soft, dry cloth or a damp cloth.



	DISPLAY							
	Time	Radio	Temperature	Seat belt indicator	Tyre indicator	Tyre location	Opening element warning light	Opening element location
Clio II	Х	Х	Х	-	-	-	-	-
Mégane (XAXX)	-	-	-	-	X <sup>(1)</sup>	X <sup>(1)</sup>	X <sup>(1)</sup>	X <sup>(1)</sup>
Scénic (JAXX)	х	х	Х	-	X <sup>(1)</sup>	X <sup>(1)</sup>	X <sup>(1)</sup>	X <sup>(1)</sup>
Mégane II (XMXX)	х	х	Х	-	-	-	-	-
Scénic II (JMOX)	х	х	Х	-	-	-	-	-
Laguna II	Х	Х	Х	х	х	х	Х	Х
Vel Satis	-	Х	Х	Х	Х	-	Х	-
Espace IV	-	Х	-	-	-	-	-	-
Avantime	-	-	-	-	-	-	-	-

<sup>1</sup> Vehicles fitted with the Tyre Pressure Monitoring System

83C





Track	Description				
1	Not used				
2	Earth				
3	- Video signal				
4	Red video signal				
5	Green video signal				
6	Blue video signal				
7	Earth				
8	Video synchronisation signal				
9	Earth				
10	Brightness adjustment				
11	Not used				
12	Screen on/off				
13	Not used				
14	Not used				
15	+ Before ignition				
16	+ Before ignition				
Screening	Earth screen				



#### CLIO II

#### **REMOVAL - REFITTING**

With the ignition switched off, position the steering column to a low setting.

Unclip and disconnect the control keyboard (1).



Remove:

- the steering wheel casing mounting bolts,
- the steering wheel upper cowling,
- the bolts.



- Remove:
- the trim strips,
- the dashboard mounting bolts.



#### Remove:

- the upper section of the dashboard,
- the screen and its mounting.





#### **MEGANE - SCENIC**

#### **REMOVAL - REFITTING**

With the ignition switched off, position the steering column to a low setting.

Unclip the CARMINAT speaker support (1) and the control keyboard (2).



Remove:

- the speaker grilles,
  the upper section of the dashboard,
  the screen mounting bolts (3).

Disconnect the screen and the keyboard.



Separate the screen from its mounting by removing the screws (4).



#### TRAFIC II

#### **REMOVAL - REFITTING**

With the ignition off, remove:

the Central Communication Unit using the Ms. 1373 tools.



Remove:

- the screen mounting bolts.

Pull out the screen to unclip it from the dashboard.



Swivel the screen, taking care not to scratch the dashboard.

83C



Open the protective housing.



Disconnect the connector by pressing on the bolt.

Separate the screen from its mounting by removing the screws.

#### SCENIC II

#### **REMOVAL - REFITTING**

Removing the navigation screen requires removing the instrument panel.

Disconnect the battery.



Unclip the trim (1) with the tool (Car. 1597).



Unclip the instrument panel rim (2).



83C

Remove the mounting bolts (3).

Remove the instrument panel.



Remove the screen mounting bolts (4).

Remove the screen.



#### LAGUNA II

#### **REMOVAL - REFITTING**

With the ignition off, remove:

- the two covers either side of the screen,
- the mounting bolts (1),
- the underside of the screen by unclipping it (2).



Disconnect the connection with the computer.



Remove the screen mounting bolts to detach it from the support.


## MEGANE II

### SCREEN AND CENTRAL DISPLAY UNIT

#### REMOVAL

The screen and the Central Display Unit are in one piece.

Unclip the upper section (A) of the dashboard.



Disconnect the sunlight sensor (**B**).



Remove the four screws (C).



Disconnect the connectors.



## REFITTING

Proceed in the reverse order to removal.

Initialise the system (refer to the **Initialisation** section).



## **MEGANE II**



### CENTRAL DISPLAY UNIT CONNECTIONS

Track	Description	
1	+ Before ignition	
2	Not used	
3	Not used	
4	Not used	
5	Not used	
6	Not used	
7	Earth	
8	Not used	
9	+ Lighting	
10	Not used	
11	Not used	
12	Not used	
13	Multimedia multiplex link to screen	
14	Multimedia multiplex link to screen	
15	Multimedia multiplex link to Central	
	Communications Unit	
16	Multimedia multiplex link to Central	
	Communications Unit	
17	On/off input to Central	
	Communications Unit	
18	On/off input to screen	

#### Note:

The screen connections are the same as in other vehicles.



# AVANTIME

## REMOVAL

Open the glovebox and remove the mounting bolts (**A**) from the screen mounting.



Pull out the assembly to the whole length of the wire so that it can be put back.

Remove the mounting screws (**B**).



Disconnect the connector.

Remove the screen mounting bolts (**C**).



### REFITTING

It is essential to respect the position of the screws according to their length.



# VEL SATIS

## **REMOVAL - REFITTING**

The instrument panel must be removed to remove the screen.

Remove the upper instrument panel trim clipped to the dashboard.



#### Remove:

 the lower instrument panel trim clipped to the dashboard,



#### Remove:

- the instrument panel mounting bolts.
- the screen mounting bolts on the instrument panel.





### **REMOVAL - REFITTING**

Using a flat screwdriver, unclip the cover.



With a screwdriver, remove the clips  $(\mathbf{A})$  on each side of the screen.



Disconnect the connectors (F)



83C

Remove the two screen mounting screws (D).



Take out the screen mounting.



# ESPACE IV

# Note:

The screen mounting has a switch  $(\mathbf{B})$  that turns off the display when the dashboard cover is closed.



83

### The satellite aerial

It picks up satellite signals so that the electronic navigation computer (CD-ROM player) can locate the position of the vehicle.

When the satellite reception is good, a **green** pictogram (1) is displayed on screen.

When the satellite reception is poor (caused by going through a tunnel or along a street surrounded by tall buildings, etc.), a **red** pictogram is displayed on screen.

Note:

Relocation is automatic once the battery has been reconnected or the navigation computer has been replaced: drive the vehicle to an outdoor open area with the ignition off and wait a few minutes. When the satellite reception is good, a **green** pictogram is displayed on screen.



### WARNING

The satellite aerial wire is very fragile. Do not bend or trap it.

Note:

The satellite aerial is also used for the hands-free phone. Some vehicles are fitted with a dual band aerial.



# CLIO II

## **REMOVAL - REFITTING**

The aerial is fitted on the roof. The headlining and boot lining (right-hand side) must be partially removed to remove the aerial.

#### WARNING

The **satellite** aerial wire is very fragile. Do not bend or trap it.

#### Note:

The satellite aerial incorporates the radio aerial and the telephone aerial (dual band).

#### Remove:

- the mounting bolts on the rear parcel shelf (3),
- the parcel shelf support,
- the linings (1) and (2).



Disconnect the aerial wires.



#### Remove:

- the headlining (partially),
- the mounting nut, then remove the aerial.





# TRAFIC II

## **REMOVAL - REFITTING**

The aerial is fitted on the roof. The headlining must be partially removed to remove the aerial.

### WARNING

The **satellite** aerial wire is very fragile. Do not bend or trap it.



# ON-BOARD TELEMATICS SYSTEM Aerial



# **MEGANE - SCENIC**



#### WARNING

The **satellite** aerial wire is very fragile. Do not bend or trap it.

### **REMOVAL - REFITTING**

#### Special notes on the Mégane

The aerial (1) is located underneath the rear parcel shelf support (left-hand side).

Removing it requires removing the CD-ROM reader with the tool (Ms. 1373) as well as its mounting.



#### Special notes on the Scénic

The aerial is located on the plenum chamber plate, underneath the engine cover.

Remove:

- the windscreen wiper arms,
- the plenum chamber half-grilles.



Disconnect the wire and detach the aerial.





## MEGANE II - SCENIC II

### **REMOVAL - REFITTING**

The aerial is fitted on the roof. Removing it requires part of the head lining to be removed (see **Bodywork** section).

Note:

The satellite aerial incorporates the radio aerial, the amplifier and the telephone aerial (dual band).

Remove the marker nut (D) and disconnect connectors (E) and (F).







## LAGUNA II

#### Special notes on the Laguna II

First-generation Laguna II's are fitted with a satellite aerial and a mono-band telephone. These aerials have been replaced by dual-band satellite and telephone aerials. They are visible on the rear section of the roof.

#### MONO-BAND AERIAL

Remove the upper tailgate lining.



Disconnect the aerial connectors (B).

Remove the mounting nuts  $(\mathbf{C})$  and then the satellite aerial  $(\mathbf{A})$ .



#### DUAL BAND AERIAL

The aerial is fitted on the roof. The head lining and rear right-hand quarter panel must be partially removed to remove the aerial.



83C

# VEL SATIS - ESPACE IV

## DUAL BAND AERIAL

The aerial is fitted on the roof. Removing it requires partial removal of the headlining and rear right quarter trim (see **Bodywork** manual).



The aerial wire is connected to the switch plate (**2**) (e.g. Vel Satis).





# AVANTIME

### REMOVAL

Lock the airbag computer using a fault finding tool.

Disconnect the battery.

Remove:

- the driver's seat,
- the central keyboard.

Remove the soundproofing material on the central keyboard tunnel,

Cut the carpet in the middle of the central keyboard in front of the gear lever,

Disconnect the satellite aerial wire at the threaded union.

Detach the carpet and soundproofing (driver's side),

Remove the satellite aerial sensor (**A**) from its housing by sliding it towards the centre of the roof,



### REFITTING

Slide the satellite aerial into its housing.

Reposition the aerial wire along its original route and reconnect it.

Refit:

- the soundproofing,
- the carpet,
- the door seal,
- the central keyboard soundproofing material,
- the driver's seat.

Reconnect the battery.

Unlock the air bag computer and carry out fault finding.



The navigation system can use:

- a special speaker,
- the voice synthesiser speaker (the Central Communication Unit regulates the messages from the voice synthesiser),
- a radio speaker.

### Special notes on the Mégane and Scénic

The special system speaker (1) is located beneath the upper section of the dashboard.



### Special notes for Clio II

The special system speaker (2) is located beneath the heating control panel. The central keyboard compartment needs to be removed to remove the speaker.



### Special notes on the Laguna II and Vel Satis

The speaker (3) is positioned in place of the voice synthesiser speaker.





### Special notes on the Trafic II

The speaker used for the navigation system is the front right-hand radio speaker.

#### Special notes on the Avantime

The special system speaker (4) is positioned near to the central keyboard light.



#### Special notes on the Mégane II

The special system speaker (**A**) is located beneath the upper section of the dashboard.



Note:

To remove it, unclip the upper section of the instrument panel (see Workshop Repair Manual **364**).

#### Special notes on the Scénic II

To remove the speaker, remove the lower trim from the dashboard.





#### Special notes on the Espace IV

### Vehicle with voice synthesiser.

The navigation speaker (1) is the same as the voice synthesiser one if the vehicle is equipped with both features.

Messages are controlled by the Central Communications Unit.

#### Vehicle without voice synthesiser.

The navigation speaker (1) is under the dashboard on the driver's side.





#### INITIALIZATION

This procedure must be followed every time a part is replaced.

#### WARNING

If the vehicle is fitted with a radio, it must be switched on during initialisation. If it is not, the steering wheel radio control will not function and the screen will not display radio data.

- 1 Switch off the ignition,
- 2 Wait until the system completely shuts down (about **1 minute**).
- 3 Switch the radio on,
- 4 Switch on the ignition (wait approximately **20 seconds**),
- 5 Press the buttons simultaneously (see table).
- 6 Read the vehicle part number (refer to the table).
- 7 Carry out the steering wheel control test,
- 8 The satellite aerial connection (connected / not connected to GPS) appears on the screen,
- 9 Ignore radio aerial and telephone tests,
- 10 Exit setting using the rotary switch,
- 11 Switch off the ignition (**1 minute**).

#### Note:

If the configuration does not correspond to the vehicle, check the vehicle wiring (multiplex lines) and the part numbers of the components.

INITIALIZATION				
Vehicles	Keys			
Clio II: Trafic II Mégane and Scénic Mégane II Scénic II Laguna II Vel Satis Avantime Espace IV	M and C M and C "–" and "→" M and C M and C M and C M and C M and C M and C M and C			

System configurations						
Vehicles	without radio	Entry level radio	Top of the range radio			
Clio II:	0312	0302	-			
Trafic II	0612	0602	-			
Mégane and Scénic	1612	1602	-			
Mégane II	1312	1326	1327			
Scénic II	1412	1402	1407			
Laguna II	0012	0002	0007			
Vel Satis	-	0102	0107			
Avantime	0412	-	-			
Espace IV	-	0207	0217			



Upgrading the navigation CD-ROM reader software takes about **5 minutes**.

If the CD-ROM is ejected during installation, carefully clean it, then reinsert it into the reader. The system will restart automatically.

1 Switch on the ignition without starting the engine.

#### WARNING

Do not switch off the ignition during this operation or the navigation system will become unusable.

- 2 Select **OK** on the Navigation system welcome screen.
- 3 Select **Navigation** from the main menu.
- 4 Eject the map CD-ROM by pressing the Eject button on the front of the CD-ROM reader. See the Navigation Assistance Technical Note for the location of the parts.
- 5 Insert the CD-ROM labelled Languages CD Nav5 All Versions.
- 6 Once the CD-ROM has been detected (which takes a few seconds), the system asks: "Install software?".
- 7 Select **Yes** if the current version displayed and new version differ.

#### Note:

If both versions are identical, select **No**: the system already has the new software. The system then automatically ejects the **Languages CD - Nav5 All Versions**. Insert the map CD-ROM into the reader.

- 8 A wait message is then displayed for about **15 seconds** before the screen goes black.
- 9 After about 10 seconds, the system indicates it will update the software ("The installation program will update your system").

10 Wait approximately **2 minutes**. A **progress bar** appears. It enables you to track the progress of the software upgrade.

#### Note:

The **"progress bar"** may remain at 100% for a few seconds. This is normal system operation.

- 11 Once the upgrade is finished, the system automatically ejects the **"Languages CD - Nav5 All Versions"**.
- 12 The system then reboots with a message: **"The system will reboot now"**.
- 13 The screen goes black and the RENAULT logo appears.
- 14 Next the system displays the "Navigation" menu.
- 15 The system upgrade is now completed. Insert the map CD-ROM into the reader.

#### Note:

The **"Languages CD - Nav5 All Versions"** must be used instead of the old one to install new languages into the system.



The system will be programmed in French by default after the navigation computer has been replaced.

You must carry out these two operations to change the language:

#### • Change menus language

- 1 With the ignition switched on, press the eject button to remove the electronic navigation computer cartographic CD-ROM
- 2 The screen will display the message **No CD in** reader.
- 3 Confirm **OK** by pressing the rotary knob.
- 4 Select the **Language** menu.

#### • Change voice messages

- 1 With the ignition switched on, press the eject button to remove the electronic navigation computer cartographic CD-ROM
- 2 The screen will display the message **No CD in reader**.
- 3 Confirm **OK** by pressing the rotary knob.
- 4 Select the **\* Configurations** menu then **Language**.

#### Note:

If the desired language does not appear in the menu, do the following:

- 1 Select other language.
- 2 The system prompts you to insert the language CD-ROM.
- 3 Insert the CD-ROM, and then press the rotary knob to confirm.
- 4 Select the language to be replaced (language 1 or 2) by turning the knob.
- 5 Use the rotary knob to select the language to load from the list of available languages stored on the CD-ROM and then confirm **load**.
- 6 Wait a few seconds. The screen will turn black and then white and display a message in black and red with a horizontal bar to show the loading time remaining.
- 7 When loading is complete, the language CD-ROM is ejected from the reader and **OK** is displayed on screen.
- 8 Continue with voice message changing procedure.
- 9 Reinsert the cartographic CD-ROM into the reader.

# ON-BOARD TELEMATICS SYSTEM Changing language



	Country languages available in the system	Country languages available in the manual
French	yes	yes
German	yes	yes
English (GB)	yes	yes
English (USA)	yes	NO
Dutch	yes	yes
Spanish	yes	yes
Italian	yes	yes
Swedish	yes (except system menus)	NO
Danish	yes (except system menus)	NO
Portuguese	NO	NO
Czech	NO	NO
Slovak	NO	NO



The vehicle has to be relocated after the electronic navigation computer has been replaced or the battery disconnected.

Drive the vehicle to an open area outdoors and wait for a few minutes with the ignition switched on.

When the satellite reception is good, a **green** pictogram (1) is displayed on screen.



If the vehicle is not correctly located on the map, drive the vehicle to along various main roads on the mapped routes (**0.6 to 1.8 miles (1 to 3 km)** necessary).

Note:

The localisation operation may take up to **20 minutes** maximum.

# ON-BOARD TELEMATICS SYSTEM Navigation menus

83C



\* depending on the version

# ON-BOARD TELEMATICS SYSTEM Navigation menus

Welcome message Monitor \* Adjustments Navigation Language \* Address Guidance Configuration Card Emergency Monitor book Traffic Guidance Screen System Language Units Volume modes config information information Changing \_ day colour \_ SDVC the menu \_ state line voice \_ messages language \_ card colour night colour volume \_ - brightness adjustment Speed Pre-Fault finding Configuration correction adjustments series number \_ product model software version week of manufacture \_ (Code) year of manufacture \_ 4112 \_ CBS software version Read GPS Read I/O Restricted Read errors Simulation data states access ' sensor status tachograph pulse usable simulation \_ longitude \_ \_ internal temperature - unusable simulation latitude battery \_ \_ \_ geographical height \_ injection button \_ number of satellites \_ steering

\* depending on the version

# ON-BOARD TELEMATICS SYSTEM Customer complaints



SCREEN DOES NOT OPEN		CHART 1
INCORRECT SCREEN ANGLE OR S	SCREEN FREEZES	CHART 2
THE SCREEN STAYS BLACK		CHART 3
SCREEN IS BACKLIT OR FROZEN	ON THE RENAULT LOGO	CHART 4
SCREEN DISPLAY FROZEN		CHART 5
SCREEN DISPLAYS "CONFIGURAT	TION ERROR"	CHART 6
NO RADIO DISPLAY ON THE CARN REMAINS FROZEN)	INAT SCREEN (OR THE RADIO DISPLAY	CHART 7
WRONG TIME DISPLAYED		CHART 8
NO CLOCK DISPLAY		CHART 9
NO TYRE PRESSURE SYSTEM DIS	PLAY	CHART 10
TYRE PRESSURE MONITORING SY	STEM DATA DISPLAYED ON VEHICLE WITHOUT	CHART 11
NO OPENING ELEMENT SYMBOL	DISPLAY	CHART 12
NO SEAT BELT WARNING LIGHT D	ISPLAY	→ CHART 13
NO VOICE MESSAGES		CHART 14
NO TRAFFIC INFORMATION MESS	AGE ON THE	CHART 15
POOR SATELLITE RECEPTION		CHART 16
NO RADIO DATA ON THE INSTRUM	ENT PANEL (OR RADIO DATA NOT REFRESHED)	CHART 17
TIME AND TEMPERATURE DATA C SCREEN NOT THE SAME	ON INSTRUMENT PANEL AND NAVIGATION	CHART 18
IF THE VEHICLE JUMPS AROUND	THE MAP DURING GUIDANCE, THE SYSTEM IS S OR THE GUIDANCE IS FAULTY	CHART 19

# ON-BOARD TELEMATICS SYSTEM Fault finding chart





# "Top of the Range" navigation system: Fault finding charts

83



# "Top of the Range" navigation system: Fault finding charts



MEGANE II
CHART 2 Incorrect screen angle or screen freezes



# "Top of the Range" navigation system: Fault finding charts

CHART 3 Screen stays black (not lit up) Check the navigation CD-ROM reader's power supply. Switch the ignition off for more than 1 minute, then press the eject button. no Does the red light come on? yes Check the green connector on the navigation CD-ROM reader: Check the Central - + 12 V feed (track 1), **Communications Unit power**  the earth (track 9). supply. Turn the ignition on and switch on the lighting. no Did it pass the tests? yes Replace the navigation CD-ROM Check the power fuse and wiring reader after obtaining authorisation (see the "Wiring Diagrams" from Techline. Technical Note). Test the green connector on the Central Communications Unit: Does the Central no - + 12 V feed (track 10), **Communication Unit**  + accessories feed (track 9), light up? the earth (track 12). yes no Did it pass the tests? yes Replace the Central Check the power fuse and wiring **Communications Unit after** (see the "Wiring Diagrams"

obtaining authorisation from

Techline.

# "Top of the Range" navigation system: Fault finding charts



# "Top of the Range" navigation system: Fault finding charts



# ON-BOARD TELEMATICS SYSTEM Fault finding chart





# ON-BOARD TELEMATICS SYSTEM Fault finding chart





# "Top of the Range" navigation system: Fault finding charts

83



# "Top of the Range" navigation system: Fault finding charts



# "Top of the Range" navigation system: Fault finding charts




83







## "Top of the Range" navigation system: Fault finding charts

83













## "Top of the Range" navigation system: Fault finding charts

83





## "Top of the Range" navigation system: Fault finding charts

83

C



#### "Top of the Range" navigation system: Fault finding charts



#### **MEGANE II**



#### "Top of the Range" navigation system: Fault finding charts



#### **MEGANE II**



#### "Top of the Range" navigation system: Fault finding charts

83



# FAULT FINDING LOG

## System: Navigation

Page 1 / 2

#### List of monitored parts: Computer

Administrative identification																			
Date:							2	0											
Sheet completed by:								<u>+</u>	<u></u>										
VIN:						[													
Engine				╈		Ī			1				<u></u>	4					
Customer complaint																			
1164 Reception fault				]	1161			Problem with opening or closing the screen			ון		1158	Guidance voice message fault					
1163	1163 Sound fault on a speaker			j	1160			Faulty control on radio front panel			Ĩ		1157	Satellite reception problem (GPS)					
1162	Problem playing the CD-ROM (single disc)			]		115	59	Display fa	ıult			1156 Navigation guidance fault					fault		
Other Your comments																			
<u>Conditions under which the customer complaint occurs</u>																			
999	Constant frequency			99			)	Regular frequency			]		999	Intermittent frequency				/	
999	Low temperature condition			]		999	)	Ambient heat					999	Very great heat					
003	Engine st		999			)	Engine running					999	Whe	n star	ting				
999	In town				999	)	In the cou				999 In mountaine			nous	ous regions				
007	When accelerating			]		008	3	When decelerating					999	During impacts / vibrations			ations		
Other Your comments																			
Documentation used in fault finding																			
Fault finding procedure																			
Type of fault finding manual:				Wo	Workshop Repair Manual: Technical Note 🗅										Assisted fault finding 🛯				
Fault Finding Manual No.:																			
Wiring diagram used																			
Wiring Diagram Technical Note No.:																			
Other documentation																			
Title and/or part no.:																			
FD 98 FD 98 Fault finding log												FD 98 ng log							

page to print or photocopy - page to print or photocopy - page to print or photocopy

# FAULT FINDING LOG

#### **System: Navigation**

Page 2 / 2

#### System-specific information

Description:

#### Additional information

Was the navigation system fitted in factory?

Have you checked the supplies?

Have you checked the earths?

Have you checked the component connections (radio navigation unit, Central Communications Unit, CD-ROM drive, display or screen)?

Have you checked the aerial amplifier connections to the "printed circuit"?

Have you checked the satellite reception aerial connections?

Your comments



FD 98 Fault finding log

page to print or photocopy - page to print or photocopy - page to print or photocopy