RENAULT

Technical Note 3585A

ALL TYPES

Subsection concerned: 01B

COMPUTER REPROGRAMMING AND **CALIBRATION PROCEDURE**

LOU,

Louinest not to be taken into account.

Document not to be taken into account.

Document not to be taken into a and sold latitudation of the Reprogramming Tool!

Document not to be taken into a product a libration of the Reprogramming Tool!

Document not to be taken into a product a libration of the Reprogramming Tool!

Document not to be taken into account.

This Technical Note relates to onboard computer Reprogramming and Calibration operations using a RENAULT.NET connection or a Reprogramming CD (Part No.: 77 11 298 859).

77 11 338 820

Edition 4 - OCTOBER 2007

EDITION ANGLAISE

"The repair procedures 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 s.a.s. 2007

CONTENTS

	Page
GENERAL INFORMATION	1
Tooling required Calibration Reprogramming	2
OPERATING PROCEDURE (Programming and reprogramming a computer)	
Preparing the RENAULT CLIP diagnostic tool	3
Programming phase - reprogramming Returning the vehicle	4 4
CLIP screens depending on programming - reprogramming step Linking the screens	6
CODE SERVER PROCEDURE (in CD mode only)	15
CONSULTING THE COMPUTER IDENTIFICATION FRAME	17
CONSULTING THE COMPUTER'S HISTORY	17
CONSULTING THE DIAGNOSTIC TOOL LOG	18
TRACE FILE (upon the request of Techline)	19
CODE SERVER PROCEDURE (in CD mode only) CONSULTING THE COMPUTER IDENTIFICATION FRAME CONSULTING THE COMPUTER'S HISTORY CONSULTING THE DIAGNOSTIC TOOL LOG TRACE FILE (upon the request of Techline) Creating the trace file Recovering the trace file after programming - reprogramming	19 19

atter programming - reprogram

atter programming - reprogram

betaken by Salib

calib



GENERAL INFORMATION

Two types of operation can be carried out in after-sales, either *programming or reprogramming* of the computer. These operations apply to all vehicles and all types of (re)programmable computer (e.g. Injection, Gearbox, Air conditioning, Instrument panel, Parking brake, UCH).

The two types of operation are carried out with the RENAULT CLIP diagnostic tool using either RENAULT.NET, or the Calibration - Reprogramming CD Part No. 77 11 298 859.

The reprogramming data available via RENAULT.NET is always more up to date than that available on the CD (Part no. 77 11 298 859).

The CD is edited and distributed every month in the same way as the diagnostic tools update. **Each CD cancels and replaces the previous one.**

Tooling required:

- CLIP with the most recent update.
- 1 connection to RENAULT.NET (requires a CLIP with a RF kit and a RENAULT.NET certificate) or
- 1 reprogramming CD, Part No. 77 11 298 859 from the current month.
- 1 RENAULT approved battery charger.
- The FAULT FINDING REPAIR MANUAL relevant to the vehicle and the system to be (re)programmed.
- 1 RENAULT.NET connection to the NRE reprogramming codes server for each calibration reprogramming with a reprogramming CD (See CODE SERVER PROCEDURE).

Document not to be taken into account.

Document not to be taken into and salibration of the property of the p

VEHICLE GENERAL INFORMATION

Programming – Reprogramming the computers



Computer

The operation consists of downloading the calibration using the RENAULT CLIP diagnostic tool.

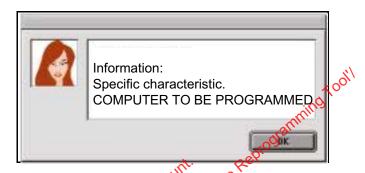
It affects computers supplied as *non operational* (also known as blank) by the Parts Department for all vehicles in the RENAULT range, but only for certain types of computer.

The types of computers which are delivered blank and to be calibrated are, to date, engine management (Petrol, Diesel and GPL injection), automatic and sequential gearboxes and ABS/ESP computers.

When To Program:

The operation is carried out as part of a computer replacement operation.

The *non operational* status of the computer, as delivered by the Parts Department, is specified in DIALOGYS by the message:



Reprogramming

The operation consists of exchanging the software and/or calibration for the most recent version using the RENAULT CLIP diagnostic tool.

This relates to computers already fitted to the vehicle as well as computers supplied as operational (also called "full". E.g. Air conditioning) by the Parts Department, for the entire RENAULT range.

It enables systematic replacement of the computer to be avoided.

After having entered the VINA the man menu, the types of (re)programmable computer are displayed in the RENAULT CLIP diagnostic too REPROGRAMMING menu.

When To Reprogram:

The operation is carried out within the framework of:

- an OTS or a Technical Note arising from a fault resulting from an After-Sales problem, or a functional improvement.
- RENAULT Technical Directives or following a request from the Techline.



OPERATING PROCEDURE (Programming and reprogramming a computer)

The operating procedure for Calibration and Reprogramming operations is strictly identical.

The operation is carried out using the RENAULT CLIP diagnostic tool, either connected to RENAULT.NETor with the reprogramming CD.

WARNING

To prevent any computer malfunctioning or locking, the following operations **must be carried out** before (re)programming.

Preparing the RENAULT CLIP diagnostic tool

- Always use the latest available version of the CLIP update.
- Always use the RENAULT.NET connection if available, in preference to the CD.

The reprogramming data available via RENAULT.NET is always more up to date than that available on the CD.

- Whenever the CD mode is being used for calibration reprogramming, always use the latest available version
 of the CD.
- Connect CLIP to the mains.
- Set the Windows screen saver time for the RENAULT CLIP diagnostic tool to NONE or 60 minutes minimum.

Setting the RENAULT CLIP diagnostic tool Windows monitor screen locking delay: In the RENAULT CLIP diagnostic tool Windows system?

- Right click on the mouse and select Properties:
- In the new **Display Properties window**, select the **Screen Saver tab**.

 Then set the screen saver to **(None)** asset the **Wait** time delay to a minimum of 60 minutes.
- Confirm and close the display windows

Preparing the vehicle

- Connect an approved battery charger to the vehicle.
- Switch off all the vehicle's electrical consumers (Lights, Interior lighting, Air conditioning, CD Radio, etc).
- Switch on the ignition (+ forced + after ignition, See Procedure).



Programming - reprogramming phase

Enter the exact VIN of the vehicle in the RENAULT CLIP diagnostic tool main menu.

WARNING

Using a VIN which is not allocated to the vehicle risks compromising the correct running of the programming - reprogramming operation, as well as the conformity of the vehicle

Apply the correct pre-reprogramming Procedure for the vehicle and for the system to be reprogrammed.

- For example, in the case of a diesel injection: Backup the computer data if the command is available.
- For example, in the case of an Automatic Transmission: Put the gear lever in the P position.
- Find the Parts Department reference number for the computer to be reprogrammed (see CONSULTING THE COMPUTER IDENTIFICATION FRAME), which is necessary in the event of an EMERGENCY PROCEDURE.
- During any calibration and reprogramming:

WARNING

DO NOT WORK ON THE VEHICLE OR OPERATE THE DIAGNOSTIC TOOL

In the CD mode only, enter a reprogramming code: see CODE SERVER PROCEDURE.

- At the end of calibration and reprogramming, observe the following instructions:
- Proceed to the WARRANTY SCREEN by pressing the NEXT button.

Apply the pre-reprogramming procedure to the wehicle and to the system to be reprogrammed.

- ─ For example, in the case of a diese injection. Write the saved computer data if the command is available.
- Enter the VIN into the computer.

Always deal with faults in all computers (when a computer is being reprogrammed, it cannot transmit data to the multiplex network. As a result faults will be generated in other computers connected to the multiplex network).

Note the CODECAL and the SUPPLIER CODE and transfer them to the Repair Order.

If the CODECAL and the SUPPLIER CODE are lost, they can be recovered: see CONSULTING THE TOOL LOG.

Returning the vehicle

- Test all the computers and deal with any faults present.
- Check that all the vehicle's current systems are correctly configured.

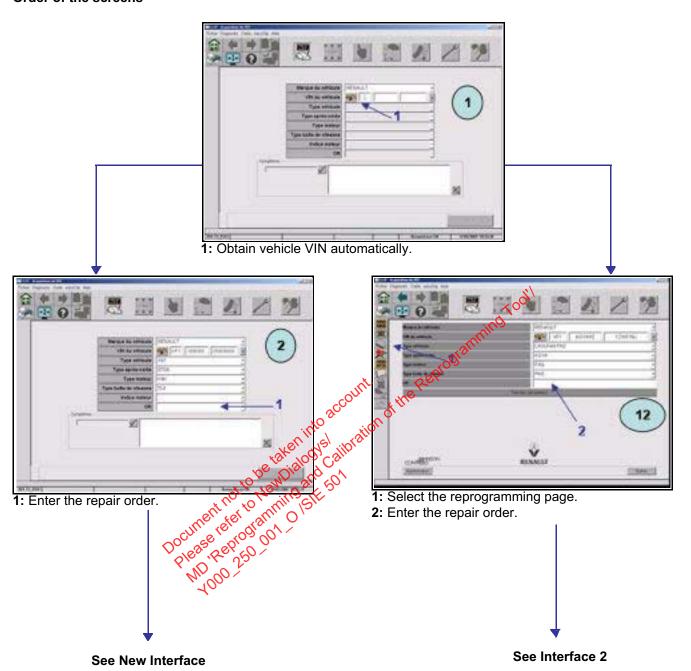


CLIP screens depending on programming – reprogramming step

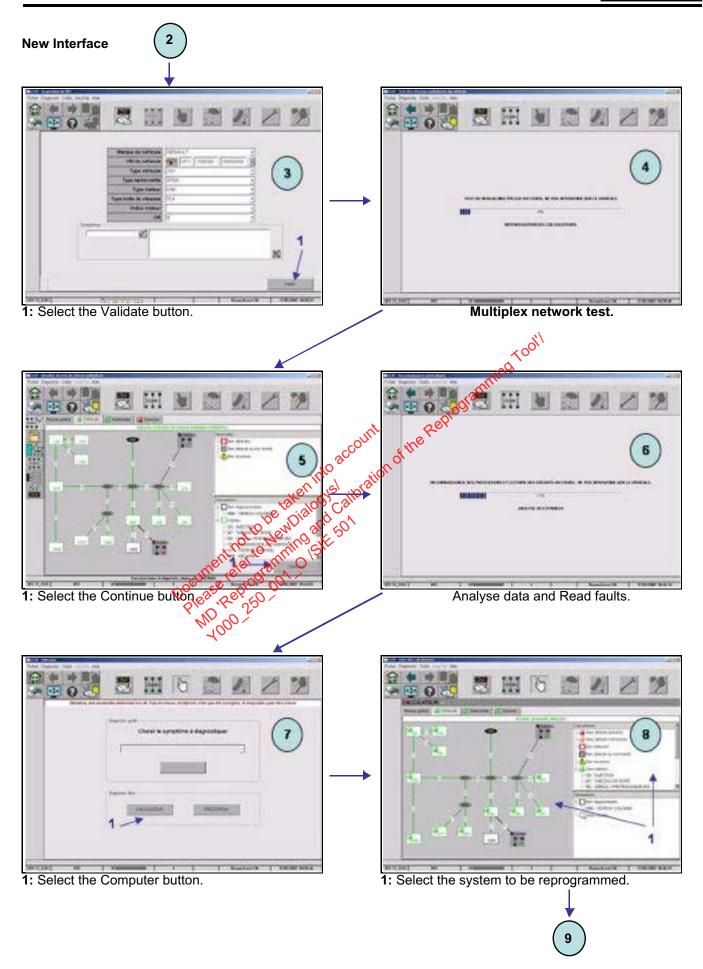
Screen	Step	Commentary	
02 12	CLIP home	CLIP determines, via the VIN, the Technical Specification of the vehicle. Warning: To ensure that reprogramming is carried out effectively, enter the correct VIN for the vehicle (17 characters).	
02 12	Reprog home	Select REPROGRAMMING and the system to (re)program.	
15	Choice of computer		
16	Connecting	CLIP identifies the computer concerned and recovers the technical data necessary for the (re)programming operation.	
17	Entering and confirming repair order/ Entering Vehicle Technical Specification	Enter the After-Sales information necessary for the warranty. Note: Enter the repair order if it has not been written in the main menu. The "Vehicle Technical Specification" field is to be filled in at the request of Techline or if required in a reprogramming Technical Note.	
18	Pre-reprogramming Message	Description of the environment to be set up before any reprogramming. Warning Follow the instructions which can differ from one computer and wehicle to the next.	
19	Checking battery voltage	CLIP automatically checks the voltage level necessary for the correctionning of the re-programming operation.	
20	Select the reprogramming model	Shogse the technical resource: either RENAULT.NET or CD.	
21 22	Finding the file(s) RENAULT.NET	P finds the technical data to download to the computer. In RENAULT.NET mode, a password is needed for authentication.	
23	File selection 250	Confirm the operation by selecting the <i>Software reference</i> to be downloaded.	
24	Enter the reprogramming code in CD mode. See CODES SERVER PROCEDURE	 In CD mode only: CLIP provides a reprogramming code. Provide the code management server with the reprogramming code and the VIN. The server issues an "After-Sales reprogramming code". Enter this code in CLIP. 	
25	File downloading	CLIP downloads the technical data to the computer.	
26	Post-reprogramming Message	Description of the actions to carry out to finish the reprogramming operation and return the conforming vehicle. Warning: Follow the instructions which can differ from one computer and vehicle to the next.	
27	Warranty screen	CLIP provides the warranty screen describing the operation performed and the CODECAL necessary for the Warranty procedure.	



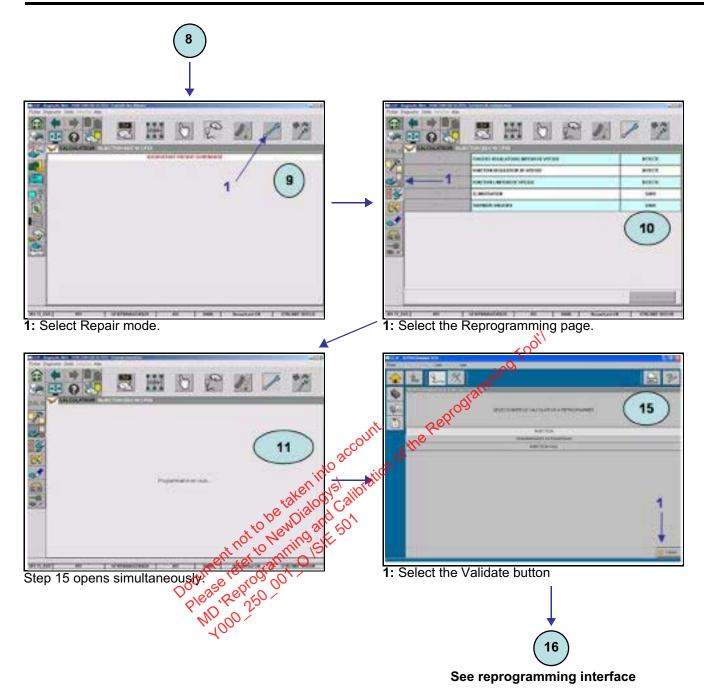
Order of the screens



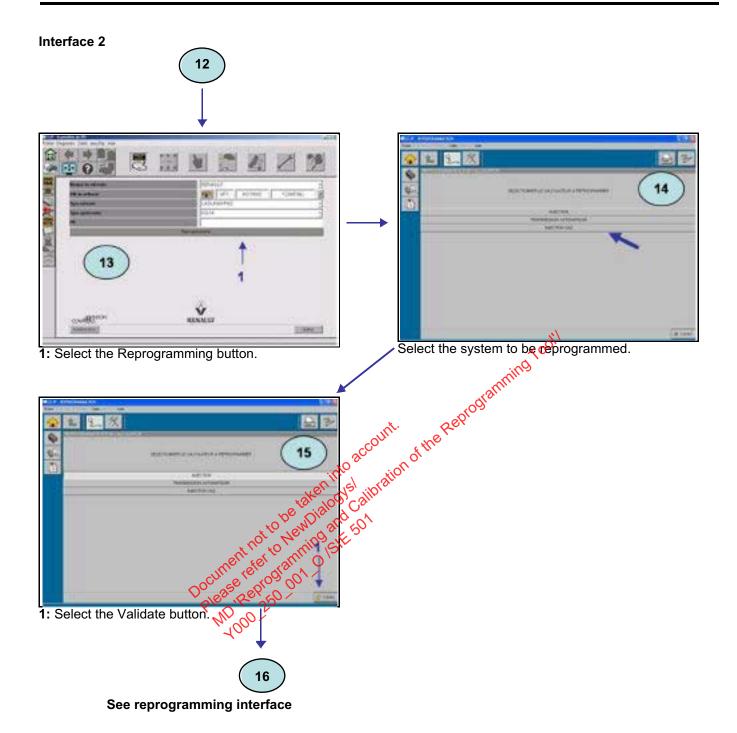




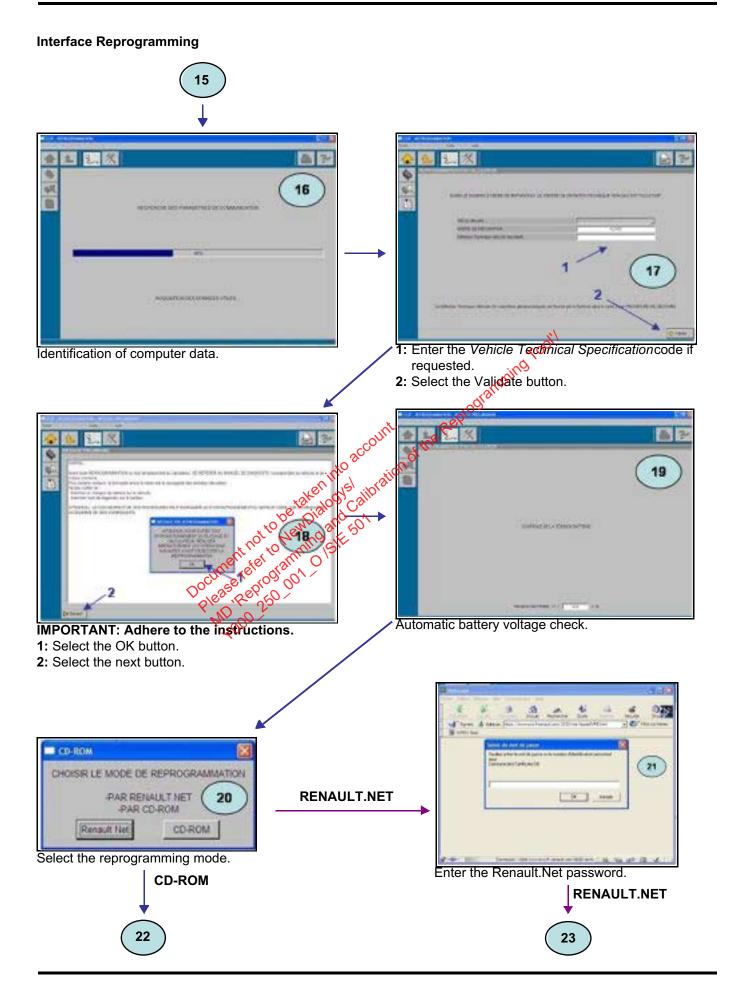




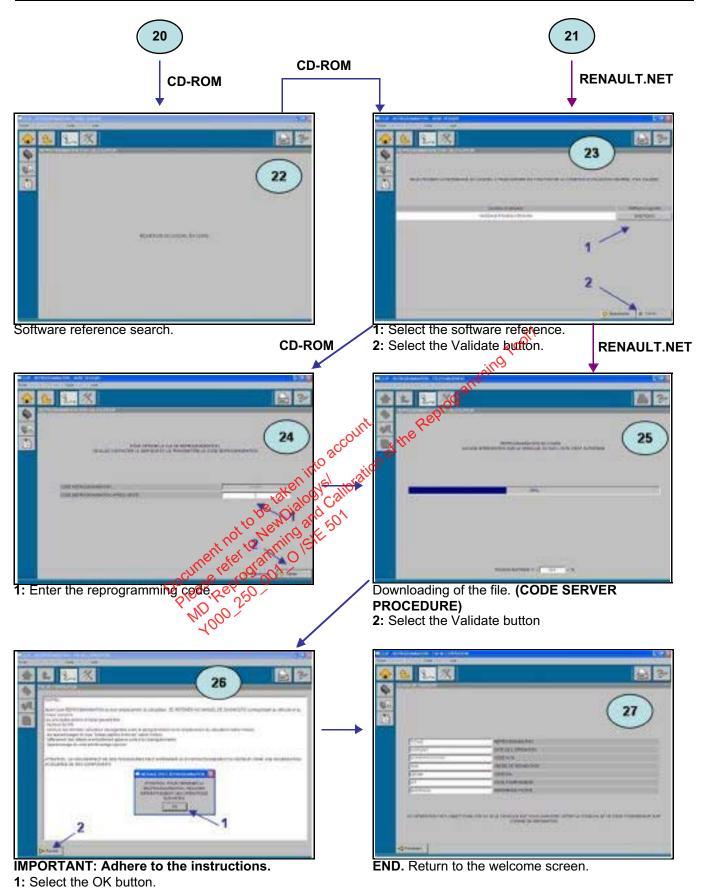












- 2: Select the next button.



CLIP SCREEN ERROR MESSAGES AND PROCEDURE TO FOLLOW

SCREE	CLIP ERROR MESSAGE	ORIGIN	PROCEDURE TO FOLLOW
01	THE VEHICLE CANNOT BE IDENTIFIED WITH THIS VIN	After the VIN has been entered into the main menu	Re-enter the VIN. Note: the VIN does not contain: the letter O as it can be confused with the number 0. the letter I as it can be confused with the number 1.
01	The AUTOMATIC IDENTIFICATION HAS FAILED	After the VIN automatic search button has been pressed	Check the sensor/PC and vehicle/sensor connections. Note: Ensure that the 4 green and red sensor LEDs are illuminated. If the fault is still present, contact the CLIP After-Sales service.
15	CLIP INTEGRITY PROBLEM	After the reprogramming button has been pressed	Reinstall CLIP with the latest available version. If the fault is still present, carry out the EMERGENCY PROCEDURE.
15	THIS VEHICLE HAS NO REPROGRAMMABLE COMPUTERS	After the reprogramming button has been pressed	CLIP integrity error: Reinstall CLIP with the latest available version. The fault is still present, carry out the EMERGENCY PROCEDURE.
16	CANNOT COMMUNICATE WITH THE COMPUTER	Following selection of the computer to reprogram	Check the connections. If the fault is still present, carry out the EMERGENCY PROCEDURE.
16	OPERATION INTERRUPTED: CANNOT ACQUIRE NECESSARY DATA	Following selection of the computer to reprogram	Restart operation. If the fault is still present, carry out the EMERGENCY PROCEDURE.
16	IMPORTANT: THE VIN READ IN THE COMPUTER TO BE REPROGRAMMED DOES NOT CORRESPOND	Computer to reprogram	As a default, use the VIN of the computer (not that from the main menu).
17	THE REPAIR ORDER NUMBER MUST NOT EXCEED 6 CHARACTERS	After a repair order number has been entered	Check that the order number entered is correct (6 alphanumerical characters).
17	THE TECHNICAL SPECIFICATION CRITERION MUST BE COMPOSED OF 10 CHARACTERS	After the Vehicle Technical Specification has been entered at the request of Techline or as described in a Technical Note.	Check that the Vehicle Technical Specification contains 10 alphanumerical characters. E.g: 0000CR347B If the fault is still present, carry out the EMERGENCY PROCEDURE.
19	BATTERY VOLTAGE TOO LOW or TOO HIGH	At any point in the reprogramming procedure	Connect an approved battery charger to the vehicle.
20	TO CARRY OUT REPROGRAMMING VIA RENAULT.NET	After the battery voltage has been checked	 Check that the wireless connection device is working. If the fault is still present, contact the CLIP After-Sales service, or use the latest version of the reprogramming CD.

VEHICLE GENERAL INFORMATION



Programming – Reprogramming the computers

SCREE	CLIP ERROR MESSAGE	ORIGIN	PROCEDURE TO FOLLOW
20	NO CD-ROM IN THE READER	When the reprogramming mode is being selected	 Insert the latest available version of the reprogramming CD. If the fault is still present, contact the CLIP After-Sales service.
20	THE REPROGRAMMING CD- ROM IN USE IS TOO OLD	When the reprogramming mode is being selected	 Insert the latest available version of the reprogramming CD. If the fault is still present, contact the CLIP After-Sales service.
20	THE CD-ROM TO INSERT IS THE REPROGRAMMING CD- ROM	When the reprogramming mode is being selected	 Check that the CD being used is a reprogramming CD. If the fault is still present, contact Techline or the CLIP After-Sales Service.
20	THE CD-ROM READER IS NOT FUNCTIONING CORRECTLY	When the reprogramming mode is being selected	 Follow the on-screen instructions. If the fault is still present, contact the CLIP After-Sales service.
	After-Sales Service ERROR 650 After-Sales Service ERROR 651	After having selected the Renault. Net mode	 CLIP integrity error in RENAULT.NET mode. Restart the reprogramming procedure. If the fault is still present, contact your IT representative or the CLIP After-Sales Service.
	After-Sales Service ERROR 652 After-Sales Service ERROR 653 After-Sales Service ERROR 654 After-Sales Service ERROR 655 After-Sales Service ERROR 656	After selecting the reprogramming method	CLIP integrity error (in RENAULT.NET mode) or reprogramming CD error (in CD mode). In mode RENAULT.NET mode, reinstall CLIP In CD mode, restart with another reprogramming CD (previous version if necessary). It has fault is still present, contact the After-Sales Service or carry out the EMERGENCY PROCEDURE.
21	TRANSMISSION PROBLEM	During authentication of Renault. Net	Check the Renault.Net connection. If the fault is still present, contact your IT representative or the CLIP After-Sales Service.
21	TRANSMISSION PROBLEM, SET	Whitst searching Renault. Net for the file to download	Restart the reprogramming procedure. If the fault is still present, contact your IT representative or the CLIP After-Sales Service.
22	DEFECTIVE DATABASE,	Whilst finding the file to download	 Check faults linked to the CD (operation, presence or version of the CD). Try with another CD (same or previous version). If the fault is still present, carry out the EMERGENCY PROCEDURE.
22	VEHICLE TECHNICAL SPECIFICATION NOT RECOGNISED IN RENAULT DATABASE	Whilst finding the file to download	Enter the Vehicle Technical Specification, checking it is correct (10 alphanumerical characters). E.g: 0000CD347B If the fault is still present, carry out the EMERGENCY PROCEDURE.
22	ERROR 10X: (X = 1 to 9), EMERGENCY PROCEDURE	Whilst finding a file	Carry out the EMERGENCY PROCEDURE.



SCREE	CLIP ERROR MESSAGE	ORIGIN	PROCEDURE TO FOLLOW
22	COMPUTER ALREADY REPROGRAMMED, CANNOT PERFORM OPERATION	Whilst finding a file	 RENAULT.NET mode: the computer does not need to be reprogrammed. CD mode: Restart the operation using the latest available version of the CD. If the message remains, the computer does not need to be reprogrammed.
22	VIN NOT RECOGNISED IN RENAULT DATABASE	Whilst finding a file	 Restart the reprogramming procedure, checking that the VIN corresponds to that of the vehicle. If the fault is still present, carry out the EMERGENCY PROCEDURE. Note: In CD mode, it is possible that CLIP will not recognise the VIN if the vehicle has been recently manufactured.
	THE AFTER-SALES	After the After-Sales	Re-enter the reprogramming code.
24	REPROGRAMMING KEY ENTERED IS INCORRECT	reprogramming code has been entered	If the fault is still present, carry out the EMERGENCY PROCEDURE.
25	CANNOT COMMUNICATE WITH THE COMPUTER	Whilst downloading a file	• Follow the on-screen instructions.
25	COMPUTER FAULT: CANNOT UNLOCK	Whilst downloading to a file	Check that the pre-reprogramming instructions have been followed: see [01B-4]. Restart the programming - reprogramming operation. The fault is still present, print the computer identification screen and the history and carry out the EMERGENCY PROCEDURE.
25	COMPUTER FAULT: CANNOT UNLOCK COMPUTER FAULT: CANNOT DELETE COMPUTER FAULT: CANNOT DELETE	etaken into alteration at taken into alteration and alteration and alteration and alteration at the alteration at the alteration and alteration at the alter	 Check that the pre-reprogramming instructions have been followed: see [01B-4]. Restart the programming - reprogramming operation. If the fault is still present, print the computer identification screen and the history and carry out the EMERGENCY PROCEDURE.
25	COMPUTER FAULT: 1000 DOWNLOAD INTERRUPTED	Whilst downloading a file	 Check the connections and the battery voltage and restart the operation. If the fault is still present, carry out the EMERGENCY PROCEDURE.
25	NON LOCKING ERROR OCCURRED DURING WRITING	At the end of downloading a file	The computer's history is full. This is not a critical error and it will not affect the reprogramming of the vehicle.
25	THE COMPUTER HAS NOT RESPONDED TO THE LAST REQUEST	At the end of downloading a file	 Try to re-establish dialogue with the computer. If the vehicle no longer starts, carry out the EMERGENCY PROCEDURE.



CODE SERVER PROCEDURE (in CD mode only)

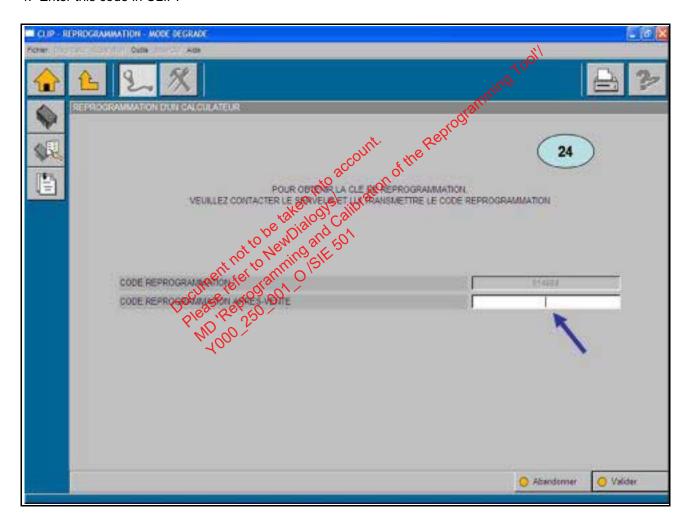
When Calibrating - reprogramming with the reprogramming CD Part No. **77 11 298 859**, enter an *After-Sales reprogramming code* to be able to carry out the operation.

This code is provided by the code management server on RENAULT.NET after having entered the VIN and the reprogramming code displayed on screen **24** of the RENAULT CLIP diagnostic tool.

Refer to the Technical Note CODE DELIVERY PROCEDURE, section Tool reprogramming key for more details.

Steps:

- 1. CLIP provides a *reprogramming code*.
- 2. Provide the code management server with the reprogramming code and the VIN of the vehicle.
- 3. The server issues an After-Sales reprogramming code.
- 4. Enter this code in CLIP.



VEHICLE GENERAL INFORMATION

Programming – Reprogramming the computers



EMERGENCY PROCEDURE

The EMERGENCY PROCEDURE must be carried out when Calibration - reprogramming is interrupted by a message advising you to contact Techline.

Example: **ERROR 10X** (X = 1 to 9)

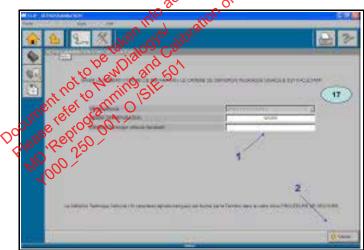
EMERGENCY PROCEDURE, PLEASE CONTACT YOUR TECHLINE

The EMERGENCY PROCEDURE consists of using ACTIS or a Fax to produce a customer fault log, to be sent to Techline, containing the following information:

- The VIN of the vehicle.
- The fabrication number of the vehicle.
- The code or error message specified in CLIP (e.g: ERROR 105).
- The type of computer (INJECTION, AIR CONDITIONING, etc).
- The Parts Department reference number for the computer read using the tool in the COMPUTER identification fault finding screen: see CONSULTING THE IDENTIFICATION FRAME.
- The Hardware Part No. for the computer read using the tool in the COMPUTER identification fault finding screen: see **CONSULTING THE IDENTIFICATION FRAME**

The speed and relevance of the solution provided by Techline will depend on the accuracy with which this information is entered into the customer fault log.

Following Techline's analysis of the fault, a **10 character code** (e.g. 000000347B) should be sent back to you. Repeat the Calibration - reprogramming procedure and enter the *Vehicle Technical Definition* code in screen **17** of the RENAULT CLIP diagnostic tool.



- 1: Enter the repair order.
- 2: Enter the Vehicle Technical Definitioncode.

If necessary, an unconventional error could lead Techline to demand:

- the computer IDENTIFICATION FRAME: see CONSULTING THE IDENTIFICATION FRAME
- the HISTORY: see CONSULTING THE HISTORY
- the consultation of the TOOL LOG: see CONSULTING THE TOOL LOG
- the creation of a trace file: see TRACE FILE



CONSULTING THE COMPUTER IDENTIFICATION FRAME

Consulting the computer identification frame can help a problem to be better understood during an **EMERGENCY PROCEDURE**.

It allows the current (dummy) component Part No. of the computer to be consulted and to confirm that the (re)programming has been correctly carried out.

On the request of Techline, print this information screen and send it to Techline:

- Access the identification frame screen:
 MULTIPLEX NETWORK TEST/COMPUTER FAULT FINDING/IDENTIFICATION FRAME
- Press the button Print screen on the top right of the keypad of the RENAULT CLIP diagnostic tool.
- Open WORDPAD(Start → Programs→Accessories→WordPad), in the Edit menu, Paste the print screen, then: print the document to send by fax to Techline,

or copy it onto a disk to send by mail to Techline, or register the document to add it as an attachment in ACTIS.

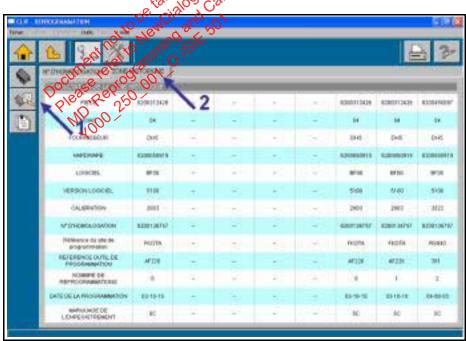
CONSULTING THE COMPUTER HISTORY

Consulting the computer's history can help a problem to be better understood doring an **EMERGENCY PROCEDURE**.

It allows the last 8 reprogramming operations stored in the computer to be consulted and displays, among others, the different (dummy) component part numbers of the computer by (re)programming date.

On the request of Techline, print this screen of information and fax it to them.

See CONSULTING THE COMPUTER IDENTIFICATION FRAME for how to print a screen.



1 - Icon: COMPUTER CONSULTATION

2 - Tab: HISTORY



CONSULTING THE DIAGNOSTIC TOOL LOG

Consulting the RENAULT CLIP diagnostic tool log can aid:

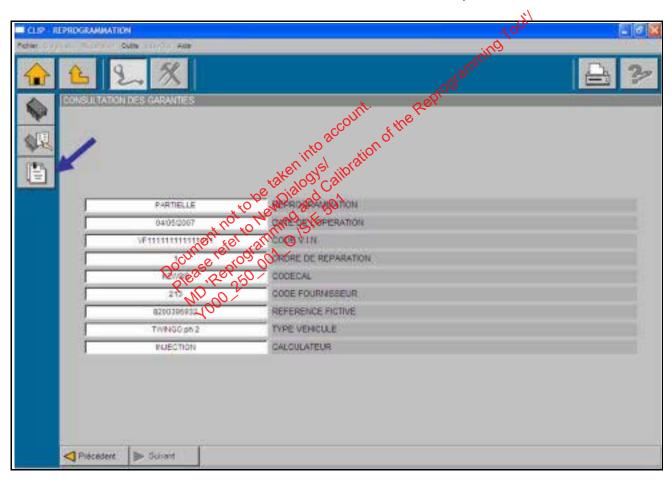
- understanding of a fault during an EMERGENCY PROCEDURE.
- the recovery of CODECAL from the last reprogramming operations carried out.

This log enables the last 50 reprogramming operations stored in the RENAULT CLIP diagnostic tool to be consulted, displayed in chronological order with the most recent first.

This screen will provide, amongst other information:

- The vehicle's VIN.
- The Repair Order.
- The programming reprogramming CODECAL.
- The new (dummy) Part No. for the computer in addition to that read in the CONSULTING THE COMPUTER IDENTIFICATION FRAME.

Upon the request of Techline, print the screen containing this information and fax it to them. See **CONSULTING THE COMPUTER IDENTIFICATION FRAME** for how to print a screen.

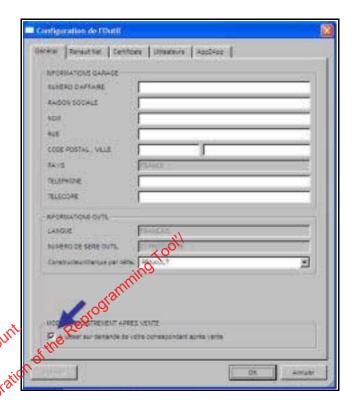




TRACE FILE (upon the request of Techline)

Creating the trace file

After starting up the CLIP software, click on the Tools tab, then on Tool configuration.





Tick the AFTER-SALES SAVE MODE box, then confirm with OK.

Carry out the Calibration reprogramming until the error message is displayed.

Recovering the trace file after programming - reprogramming

- Close the CLIP application (Return to the CLIP home page then EXIT).
- In the Windows Start menu (bottom left-hand corner of the Windows screen), select My Computer. Then select (double left click) the following: Local disc (C:) / CLIP / DATA/ USER / LOGS.

Send this file to your Techline by e-mail.

For all RENAULT CLIP diagnostic tools under Windows XP, compress the file "clip.log":

- Select the clip.log trace file.
- Right click the on the clip.log file, and select Properties.
- Then send_to Compressed (zipped) folder.