Procedure: L140-08.04
Operation:. ECUs Re-flash (<u>only for L140 with manual gearbox</u>).

A   Preliminary warnings

1.1   Before starting with the procedure be sure that you are equipped with necessary tools as at point B and you have correctly configured your lap top following the instructions reported in CT.06.04.

B   Tools:

1.2   Can interface type *"C"*(fig. 1 p/n 69190056) recognizable from the old version from the sticker printed with the blue letter C (pic.1 ref. A).
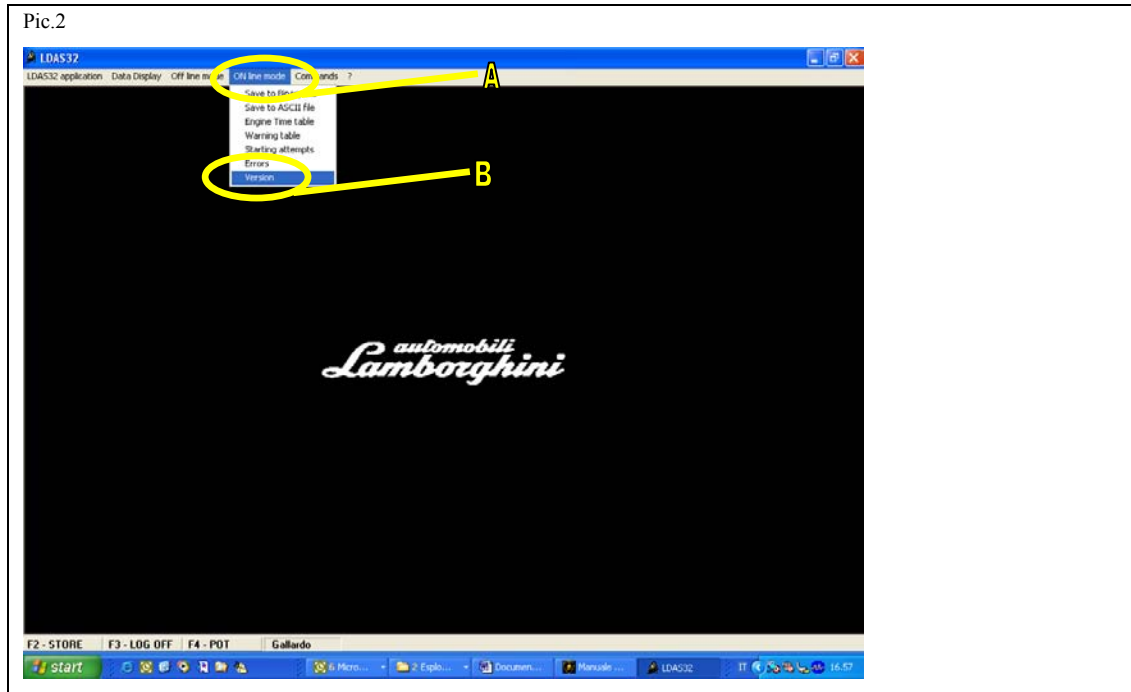
Pic.1

P/n 69190056

1.3   Lamborghini Diagnostic Tester configured as reported in CT.06.04.

C   Reflash LIE e GFA ECU.

1.4   Connect your p.c. by the can interface (pic.1 p/n 69190056) to the vehicle.
1.5   Open LDAS.
1.6   Key "on" battery e charged between 8-14 Volt.
1.7   From the tool bar select *"ON line"* (pic..2 ref. A).
1.8   Click on the command *"Version"* (pic.2 ref. B).

Pic.2

1.9 Note *"Firmware" and "Map" code* of LIE(bank 1 e bank 2) and GFA ECU (bank1 and 2). (pic.3).

Pic..3

1.10 Use template nr 1 and 2 e to find the program step of the ECU (step 1 or 3) fit on the vehicle using the *"Firmware"* and the *"Map"* code.
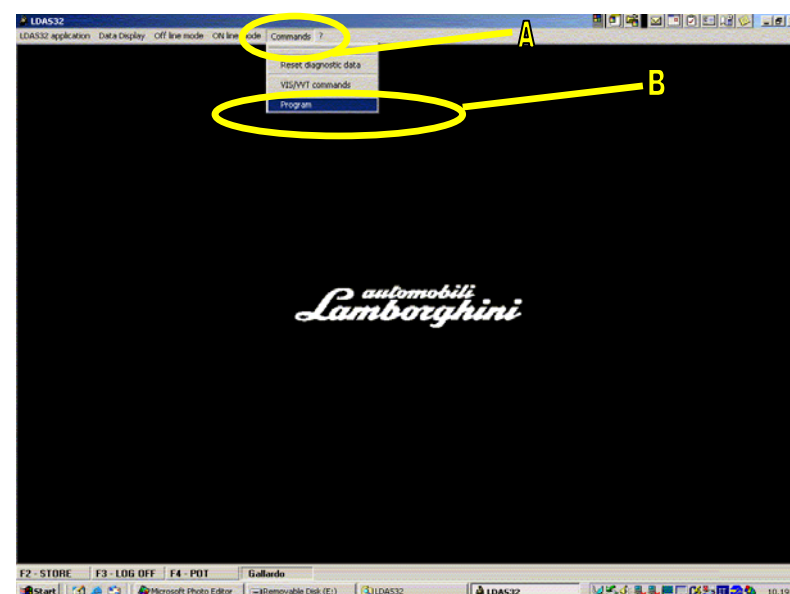
Temp. 1-codes of the ECU to be re-flashed

manual trasm.		Step 1	Step 3
Lie	Firmware	V4015608	V4022804
	Map	E15652M7	E228A2M2
	P/n	400 907 557 D	400 907 557 H
Gfa	Firmware	G2021001	G2022200
	Map	G2210ME4	G2222ME3
	P/n	400 959 433 D	400 959 433 T

Temp. 2-codes of the ECU already re-flashed

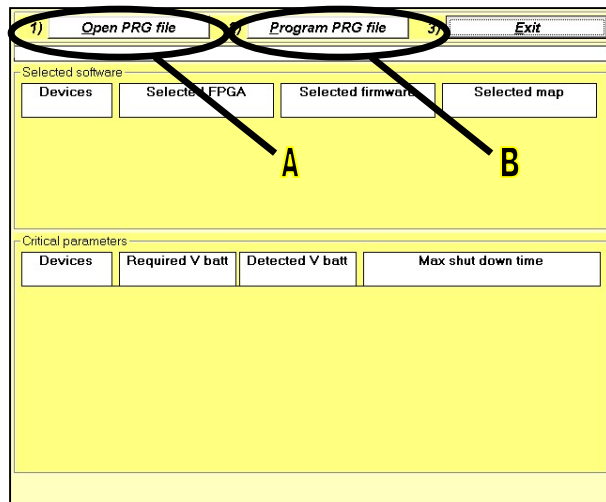| manual transm.		Step 1	Step 3
Lie	Firmware	V4022906	V4022804
	Map	E22952M9	E228A2M4
	P/n	400 907 557 AA	400 907 557 AB
Gfa	Firmware	G2022205	
	Mappa	G222ME5	
	P/n	400 959 433 AE	

1.11 From the pull down menu *"Commands"* (Pic.n.4 A) select *"Program"* (Pic.n.4 B).

Pic. 4

1.12 On the screen it is displayed the ECU program window (pic..8)
1.13 Select *"Open PRG file* (pic.5 ref. A).

Pic..5

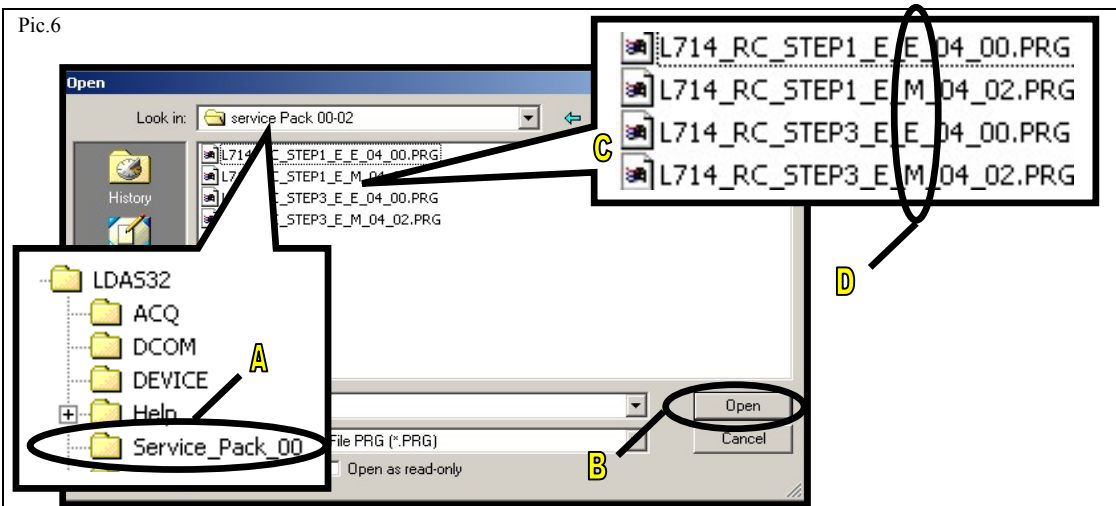**1.14** Click *"service pack 00-02"*(pic.n.6 A).

1.15 Select the file:

- L714_RC_Step1_E_M_04_02.PRG for vehicles which fit ECU with programming **step 1** (pic.6 C) ******.
- L714_RC_Step3_E_M_04_02.PRG for vehicles which fit ECU with programming **step 3** (pic.6 C).******
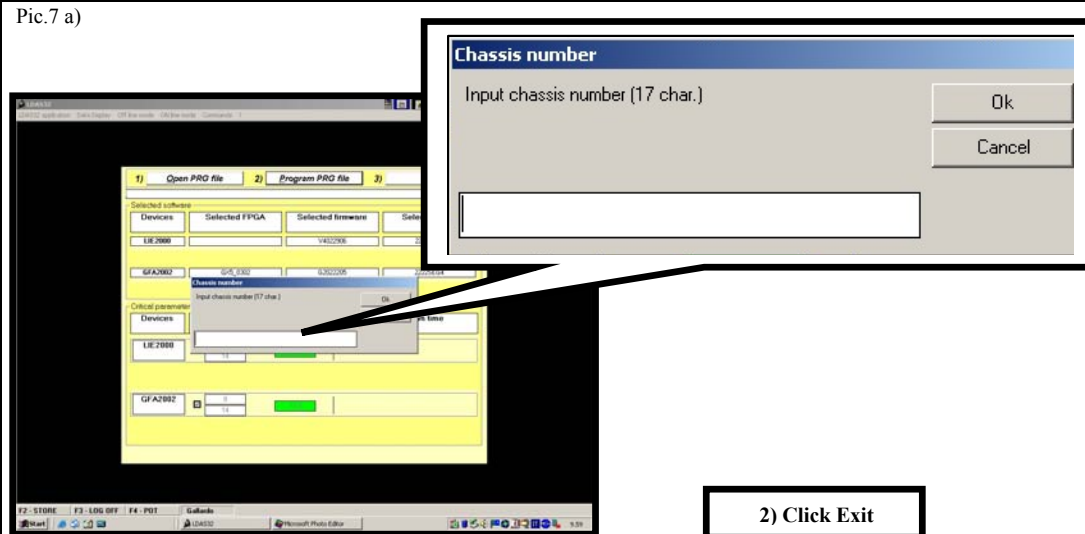
**Warning: Files are named (pic.n.6 C):

- L714_RC_= model: Gallardo.
- Step *X* = ECU program step.
- E = Europe: market version.
- **M = manual gearbox** (ref. D pic.5).
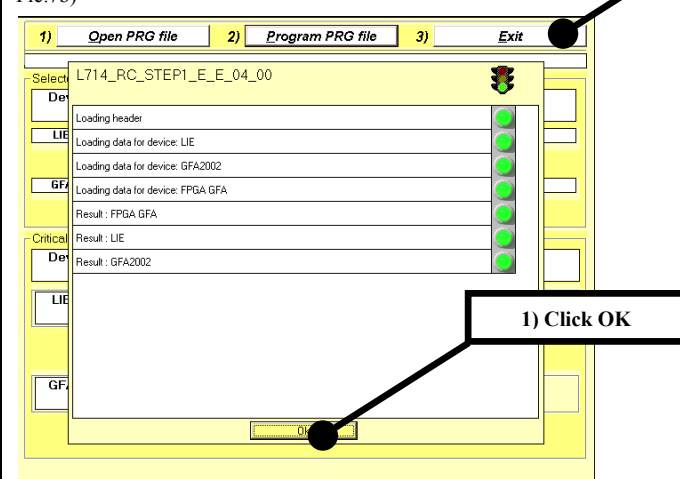- E = E-gear. (ref. D pic.5).
- 04=model year.

Pic.6

1.16 Click on *"open"*(fig.9 B) and the system automatically loads the file.

1.17 Select *"Program PRG file"* (pic.5 ref. B)

1.18 Enter in *"Chassis number"(* pic.7) the complete V.I.N. of the vehicle (17 digits) then click *"OK"* in order to re-flash the ECU.

1.19 Click *"OK"* in pic.7b.

1.20 Clicca *"Exit"*. (pic.7b).

Pic.7 a)

2) Click Exit

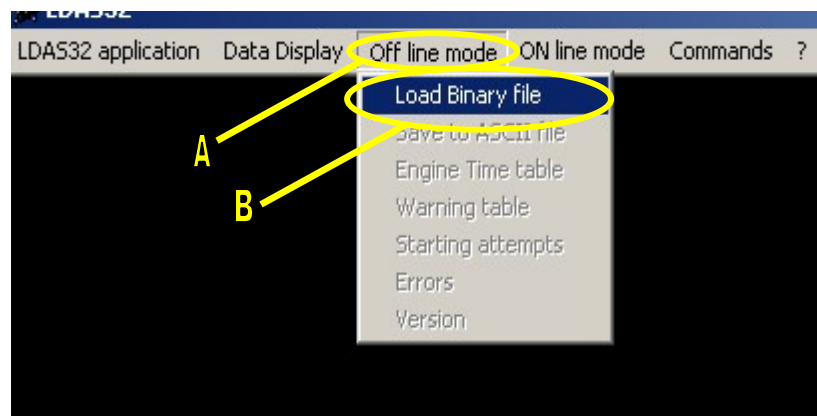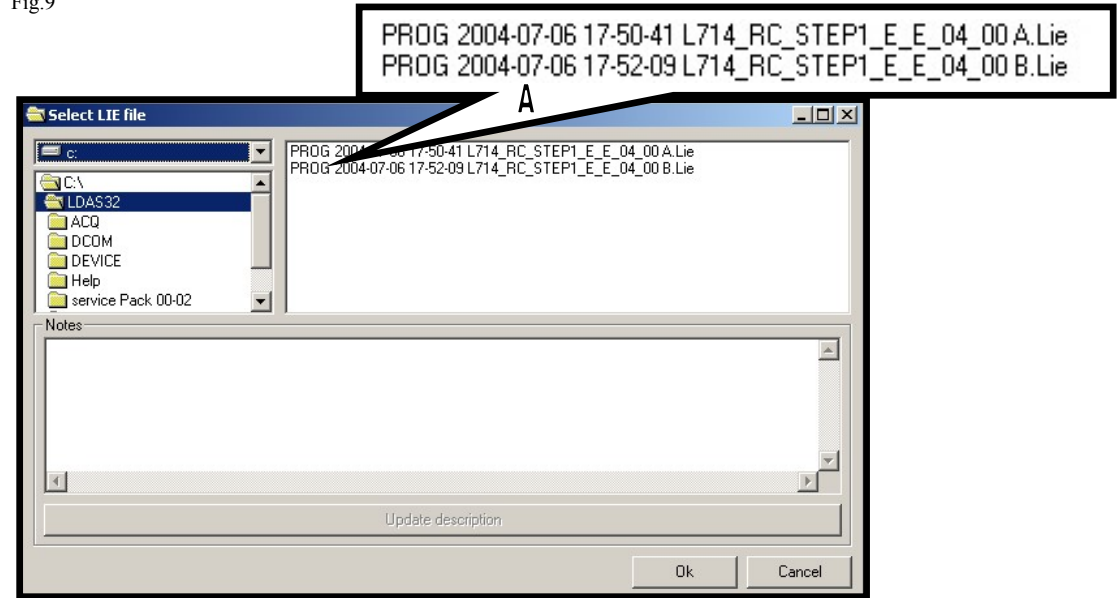Pic.7b)

1) Click OK

1.21 After the ECU re-flash re-open the program clicking the icon [LDAS32] on the desktop bar of the desktop de.

1.22 Select *"Off line mode"* from the tool bar (ref A fig.8).

1.23 Select *"Load Binary file"* in the pull down menu.

Fig.8

1.24 The system creates two files one that reports the data before the ECU programming and another one after it. They are identified by the capital letters A and B (pic.9 ref. A).

Fig.9

1.25 The system creates two files, one that reports the data before the ECU programming and another one after it. They are identified by the capital letters A and B (pic.9 ref. A).

1.26 Delete all the possible errors stored in the system using LaRA-AS and LDAS (erase fault memory code).

1.27 Enclose the mentioned files (pic.9 ref. A) to the **warranty claim ont the Warranty Web System**.

1.28 Put on the two LIE ECUs the sticker (p/n 901475000) for identification that the reflash was done. Fill in with the number: L140.A-??.04 (?? Number of the service group) and date.

| Automobili Lamborghini |
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☐☐☐☐.☐-☐☐.☐☐
Numero - Nummer - Number

Data - Datum - Date ☐☐/☐☐/☐☐

Eseguito dal Concessionario - Ausgeführt vom Händler - Done by Dealer

Firma - Unterschrift - Signature _____

p/n 901475000

1.29 Disconnect the computer.

1.30 Go on with step D.

D   Road test:

1.31 Turn the engine on and warm it up until the water and oil temperature are higher than **90 °C**. For this purpose it is recommended to drive the car for at least ten kilometres. Now the system automatically starts a *"self learning"* procedure***.

***Warnings: The engine can idling irregularly because the throttle valve is not properly adjusted.

1.32 Once the temperature is 90 °C wait **60 seconds** so that the system acquires the data for the DBW adjustment.

1.33 Let the engine run at idle until it becomes stable.