Software 06.10.00.04 version

The changes introduced in the software version 06.10.00.04 are the follows:

- On CHANGE-OVER page:
    - in TYPE OF CHANGE-OVER, the START ON GAS and MONOFUEL options have been introduced.
    - EMERGENCY START ALLOWED and RESET START options have been introduced.
- On MODIFY CARB. page the ENABLES COMPLETE RESET OF ERRORS and ENABLES THE SELECTIVE RESET ERRORS option has been introduced.
- EMISSIONS page has been introduced
- On SERVICE page the option STOP EDIT CONFIGURATION has been introduced.
- Introduced the new firmwares that manage the new functions included in the software, the firmwares are loaded during the software installation and are as follows:
    - MP48 - 2001MP_ # 01149
    - MP48OBD - 2001MPOBD_ # 00983
    - MP32 - MP32_ # 00570
    - 2568D - 2568D_ # 01345
    - MP6C - MP6C_ # 01340

It has to be update the control units with these FW if you want to make functionally all the changes made.

TYPE OF CHANGE-OVER

In CHANGE-OVER page on TYPE OF CHANGE-OVER it has been introduced the possibility to select two new options:

- **START ON GAS:** selecting this option the control unit starts directly on gas but everything else remains unchanged, so once the engine is started the control unit functions do not change compared to when is select the change-over in acceleration or deceleration. Obviously when this option is selected, all the parameters that determine the transition to gas disappear, such as the temperature for the change-over or the rpm threshold for the change-over.
- **MONOFUEL:** selecting this option, the control unit will operate like in "Monofuel mode" and therefore in addition to starting with gas, ALL the petrol-related functions will be deactivated. So it will not possible to change back to petrol mode by the switch who will only function as a level indicator, moreover it will not be possible to use all the temporary petrol or petrol contributions functions and the control unit will not change back to petrol for low gas pressure

ATTENTION: in this mode the automatic contributions at high revolutions are not given if the petrol injection time reaches the cycle time, in this condition the gas injector will remains constantly open and it will be not possible to control the carburation with the risk of damaging the engine.
It is therefore important to check that this condition is not reached at high revolutions using a correct gas injector nozzle

EMERGENCY START ALLOWED and RESET START options

In CHANGE-OVER page the options EMERGENCY START ALLOWED and RESET START has been introduced:

- **EMERGENCY START ALLOWED :** all the AEB ECUs has the possibility to do the emergency start directly in gas, this possibility can be used if the car have some problem and it can't start in petrol. With the option EMERGENCY START ALLOWED is possible to limit the emergency starts that the ECU can do. In the new ECUs the number of emergency starts is set at 255 (it mean infinite) but is possible to change this number and limit the emergency starts. For example if you set 10, the ECU can do 10 emergency starts and after will not possible to do it again. The first number indicate how many emergency start the ECU made.
- **RESET START:** the RESET START button can be used to do the reset number of emergency starts
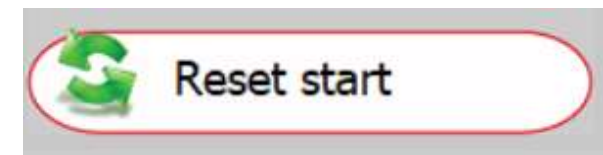
MODIFY CARB. – RESET ERROR OPTIONS

In MODIFY CARB. page the options ENABLES COMPLETE RESET OF ERRORS and ENABLES THE SELECTIVE RESET ERRORS has been introduced, these options are present only on ECU that have OBD connection and is possible to enable these option only if the ECU is connected to the OBD of the car.

- **ENABLES COMPLETE RESET OF ERRORS:** enabling this option the GAS ECU, only during the functioning on gas, do the erasing of errors present in the petrol ecu
- **ENABLES THE SELECTIVE RESET ERRORS :** enabling this option the GAS ECU, only during the functioning on gas, do the erasing of errors present in the petrol ecu but in this case the GAS ECU will send the command of reset only if the petrol ECU memorize one of these error:

- P0171 // System Too Lean (Bank 1)
- P0172 // System Too Rich (Bank 1)
- P0174 // System Too Lean (Bank 2)
- P0175 // System Too Rich (Bank 2)
- P0420 // Catalyst System Efficiency Below Threshold (Bank 1)
- P0430 // Catalyst System Efficiency Below Threshold (Bank 2)

If in petrol ECU there isn't one of these errors the GAS ECU will not send the erasing command.

Warning: enable this option only during vehicle testing or tuning, leaving this option enabled during normal operation could cause damage to the car.

EMISSIONS page

EMISSIONS page has been introduced on the page list present in VEHICLE CONFIGURATION.
In these page there are the following options:

- **EXIT CUTOFF LEANING:** with this parameter is possible to change the quantity of gas injected, compared to the gas map, in the moment that the engine exit from cut-off condition. The value inserted here is a percentage referred of the K value present in the gas map, when the engine exit from cut-off the gas ECU, to determinate the gas time injection, doesn't use the K value present on the gas map but use the the value of gas map plus this percentage

- **LEANING NUMBER INJECTIONS:** this value is the number of injections during which the gas ecu apply the percentage of correction set in EXIT CUTOFF LEANING

- **GAS INJECTION IN CUTOFF:** Sometimes, during the CUTOFF, the gas pressure could increase a lot compared to the normal pressure of work, this condition could cause some problem of stalling during the exit from CUTOFF. This options can used to discharge the high gas pressure during CUTOFF condition to solve this problem.
- **RPM:** this is the threshold RPM above which the strategy is enabled
- **INJ. TIME (ms):** this is the gas time injections applied during the CUTOFF condition

Warning: GAS INJECTION IN CUTOFF could cause some jerks during the CUTOFF, is necessary to verify better this conditions.
To avoid this problem we suggest to set a low values of time gas injection

Emissions

Exit cutoff leaning	0	%
Leaning number injections	0	
Gas injection in cutoff	rpm 0	inj.time (ms) 0

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SERVICE

When you connect to an ECU unit with the latest firmware version loaded, the SERVICE icon appears.
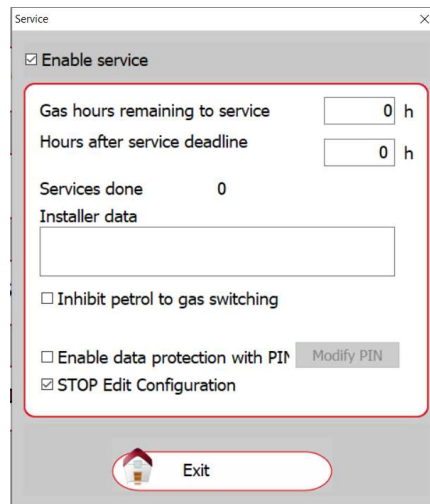
Clicking on the icon to open the SERVICE page.

At the bottom of this page the new STOP EDIT CONFIGURATION option has been introduced.

By enabling this option, when you exit the SERVICE window, all the buttons of the MAIN MENU are inhibited except DISPLAY and DIAGNOSIS.

In this way it will not possible to make any changes to the configuration loaded in the control unit, will be only possible to view the operating parameters and enter to diagnosis page.
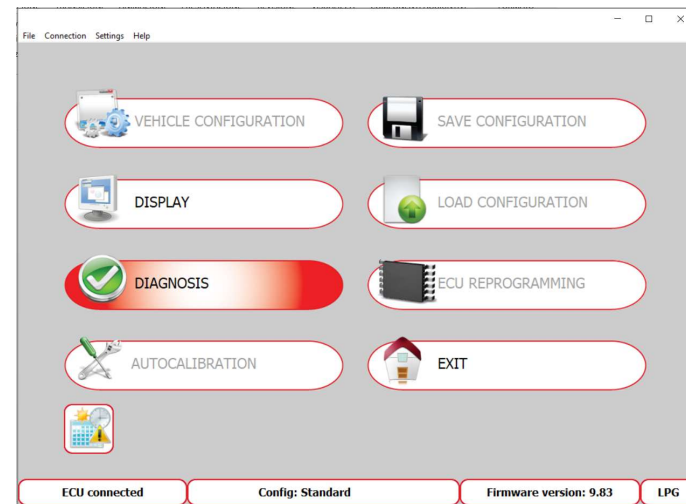
To re-enable the other items of the MAIN MENU it will be necessary to disable the STOP EDIT CONFIGURATION option.

If in addition to this option, ENABLE PIN DATA PROTECTION WITH PIN is enabled, access to the SERVICE window will require the protection pin.