ALFA ROMEO MITO – GIULIETTA IDEA
FIAT GRANDE PUNTO [05] - BRAVO [07] - PUNTO EVO [09]

EFI 1.4 16V Turbo Multiair 8GMF ECU

Resetting adaptive parameters

The function resets the indelible memory containing calibrations of components subject to wear and deterioration.

After executing this function, the ECU shall re-learn the parameters:
1. If the A/C system or cruise control are present, these are learnt automatically when they are switched on
2. manual transmission is acknowledged by pressing and then releasing the clutch
3. The brake antilock device is independently identified via the CAN line
4. Self-adaptive parameters related to carburation correction are learnt in a slow yet independent way during the vehicle driving cycles (the control shall be executed exclusively following replacement of components affecting engine carburation (ex. lambda probe, manifolds pressure sensor, etc.])

Replacement of IAM intelligent alternator module

In case of replacement of the intelligent alternator module, this control shall be executed to allow for the ECU calibration with the new component; when this control is executed, factory setting values are restored in the ECU

Flywheel substitution

When the engine flywheel is replaced, this control shall be executed to reset the adjustments learnt by the engine ECU on the previous flywheel; by executing this control, values in the engine ECU (that get learnt every time the engine is turned on) are reset; the parameters being learnt are those of the UniAir module and phonic wheel/flywheel
Warning: then follow the phonic wheel learning instructions

Phonic wheel learning instructions

This adjustment allows for phonic wheel learning after the following operations:
Service or replacement of the phonic wheel, replacement of rpm sensor, replacement of engine ECU or reprogramming of engine ECU
Warning: before this adjustment, the self-adaptive parameters reset function shall be executed

Vehicle type learning reset

This procedure erases the configuration of transmission, A/C system, cruise control, ABS and power steering type;
the procedure shall be executed only in case of configuration errors or in case of installation of ECUs taken from another vehicle.
The new configuration settings will be learnt as follows:
1. If the A/C system or cruise control are present, these are learnt automatically when they are switched on
2. manual transmission is acknowledged by pressing and then releasing the clutch
3. The brake antilock device is independently identified via the CAN line

Adaptation for engine ECU reprogramming/replacement

This procedure allows for the ECU to learn the right position of the throttle valves and to reset in the ECU all the self-adaptive parameters of the UniAir module following ECU replacement;
the procedure shall be executed in case of ECU reprogramming/replacement

Vehicle type learning reset

This procedure erases the configuration of transmission, A/C system, cruise control, ABS and power steering type;
the procedure shall be executed only in case of configuration errors or in case of installation of ECUs taken from another vehicle.
The new configuration settings will be learnt as follows:
1. If the A/C system or cruise control are present, these are learnt automatically when they are switched on
2. manual transmission is acknowledged by pressing and then releasing the clutch
3. The brake antilock device is independently identified via the CAN line

Conditioner self-learning instructions
Cruise control self-learning instructions

The following instructions shall be performed after the execution of the vehicle configuration reset function:
Turn ignition key to on position, start the engine and wait for some seconds, then, with engine at idle speed, switch on the A/C unit using the control on the dashboard

Replacement of overboost components

After replacing the turbine, the turbine or turbo depression valve adjustment control, we shall execute this control to allow for the ECU calibration on the new component: by executing this control, all the adaptive parameters in the ECU concerning the turbocharger assembly and the overboost counter are reset

Turbo adaptive parameters reset

The function shall be executed in case of replacement of the turbine, turbo actuator and/or turbo depression valve, by executing this control, all the self-adaptive parameters in the ECU concerning the turbocharger assembly and the overboost counter are reset

UniAir module substitution

After replacing the UniAir electro-hydraulic module (valves control module), allow for the ECU calibration on the new components; the control resets all the parameters of the UniAir module in the ECU.

Upstream lambda sensor substitution

In case of replacement of the lambda probe upstream the catalyst, this control shall be executed to allow for the ECU calibration with the new component; the procedure shall be executed in case of replacement of the following components:

1. Catalyst
2. Upstream lambda probe

Executing this procedure complies with pollutant emission standards

Replacement of injectors or catalyst or downstream lambda probe

In case of replacement of the following components:

1. lambda prove downstream the catalyst
2. Injectors
3. catalyst

The control allows for factory settings to be restored in the ECU.

Oil temperature sensor substitution
Cam and/or phase sensor substitution
Replacement of timing belt or rpm sensor
Replacement of finger followers with valves control roller

After replacement of the engine oil temperature sensor (used to ensure correct operation of the UniAir unit), of the cam sensor or timing sensor, timing belt or rpm sensor, you shall execute one of the abovementioned functions;
The controls allow for the ECU calibration on the new component and for the reset of the UniAir module adaptive parameters

AFAS value reset

By executing this control, all the adaptive parameters, in the ECU, concerning AFAS functions (timing components wear adjustment functions) are reset, this procedure shall be executed after the replacement of the timing belt, required conditions for the execution of the procedure are ignition key on and engine off

Engine oil substitution

Execute the reset function upon every engine oil replacement

Motorized throttle substitution

The function allows for learning of the lower/upper limit and limp-home of the motorized throttle, by detecting the voltage value of related positions
operation required after replacement or cleaning of the throttle body or in case of power delivery not being smooth or engine switching off at idle.
The procedure may last up to 5 minutes maximum; required conditions are the following:
1. Vehicle at standstill, key on
2. Water temperature ranging between 6 and 12°C
3. Intake air temperature ranging between 40°C and 90°C
4. Air and water temperature sensors shall not be faulty

Gear sensor value neutral learning

Execute this function after replacement of the gearbox sensor; this allows for the engine ECU to correctly manage the Start&Stop system.
The required conditions to execute this procedure are the following:
°Key on start

°Gear shift lever in neutral position
°Clutch pedal not pressed
°No fault present (engine rpm sensor, vehicle speed and clutch switch)

UniAir actuator dispersion

This adjustment is aimed at adjusting dispersion of components affecting the actuators of the air intake circuit (control valve), in particular it progressively eliminates the mechanical error of the camshaft and the dispersion of the UniAir actuator; the procedure shall be executed in the following cases:

Engine ECU replacement
Crankshaft replacement
Rpm sensor replacement
Camshaft replacement
Camshaft sensor replacement
UniAir module replacement
UniAir oil temperature sensor replacement
Replacement of UEGO lambda probe upstream the catalyst

Warning: before executing this control, the AFAS values reset function shall be executed

Power limitation function

This control disables the vehicle power limitation function.
Warning: once this control is sent, re-activation of power limitation will be disabled

FIAT 500 [2007] –GRANDE PUNTO [2005] - PUNTO EVO [2009]

EFI 1.2 8V / 1.4 8V 5SF9MS / 5SF8MR ECU

Resetting adaptive parameters

The function resets the indelible memory containing calibrations of components subject to wear and deterioration.

After executing this function, the ECU shall re-learn the parameters:
1. If the A/C system or cruise control are present, these are learnt automatically when they are switched on
2. manual transmission is acknowledged by pressing and then releasing the clutch
3. The brake antilock device is independently identified via the CAN line
4. Self-adaptive parameters related to carburation correction are learnt in a slow yet independent way during the vehicle driving cycles (the control shall be executed exclusively following replacement of components affecting engine carburation - for ex. lambda probe, manifolds pressure sensor, etc.)

Vehicle type learning reset

This procedure erases the configuration of transmission, A/C system, cruise control, ABS and power steering type;
the procedure shall be executed only in case of configuration errors or in case of installation of ECUs taken from another vehicle.
The new configuration settings will be learnt as follows:
1. If the A/C system or cruise control are present, these are learnt automatically when they are switched on
2. manual transmission is acknowledged by pressing and then releasing the clutch
3. The brake antilock device is independently identified via the CAN line

Phonic wheel self-learning reset

This control shall be used in case of phonic wheel or rpm sensor replacement,
then follow the phonic wheel learning instructions

Phonic wheel learning instructions

Execute this function after replacement of the rpm sensor or phonic wheel,
it allows to turn off the engine blinking indicator lamp

Throttle self-learning

The function allows for learning of the lower/upper limit and limp-home of the motorized throttle, by detecting the voltage value of related positions
this operation is usually required after replacement or cleaning of the throttle body or in case of power delivery not being smooth or engine switching off at idle

Reset learnt value of timing sensor

This control shall be executed after replacement of the timing sensor, replacement of timing belt or replacement of the camshaft.

SKODA OCTAVIA [2004]

Climatronic / Climatic air/conditioning unit

Climatic: Basic adjustment

The control shall be executed in case of intervention on the air distribution assembly, in case of replacement of flap motors or in case of replacement of the Air conditioning control unit

ECU coding

In case of replacement of the A/C unit ECU, the right coding code of the new unit shall be entered by means of this function

ABS MK70 - MK60 - MK 60EC

ABS input valve adjustment

This adjustment shall be performed in case of replacement of the ABS ECU; then perform the adjustment of separation valves as well

ABS separation valve adjustment

This adjustment shall be performed in case of replacement of the ABS ECU; then perform the adjustment of input valves as well

Roller brake testing bench

Function to be used in case the vehicle shall be placed on a brake test bench to avoid damaging the 4wd system

ESP test enabling

This control is used to test the plausibility of signals related to lateral acceleration sensors, Yaw sensor, brake pressure sensor and steering angle sensor; once the test has been started, it cannot be aborted.
The drive test shall be performed after every disassembly or replacement of the ESP system electric components

ECU coding

In case of replacement of the ABS/ESP ECU, the right coding code of the new unit shall be entered by means of this function.

Steering wheel angle sensor calibration

This control shall be performed in case of steering angle sensor replacement or in case of misalignment (for ex. flat battery, vehicle level adjustment operations).

Brake pressure sensor adjustment

This control shall be performed in case of brake pressure sensor replacement or in case of misalignment (for ex. battery flat/disconnected)

Lateral sensor calibration

This control shall be performed in case of replacement of the component containing the acceleration sensors, or in case of misalignment (for ex. battery flat/disconnected)

Longitudinal acceleration sensor calibration

This control shall be performed in case of replacement of the component containing the acceleration sensors, or in case of misalignment (for ex. battery flat/disconnected)

Tyre pressure monitoring system adjustment

The function runs a plausibility check on the tyre pressure monitoring system (if present)

Adaptation of ABS with power steering system

It allows for the power steering system to be acknowledged by the ABS system, the control shall be used in case of ABS unit replacement or configuration loss (ex. battery flat)

Adaptation of ABS with DSG transmission system

It allows for the DSG transmission system (if present) to be acknowledged by the ABS system, the control shall be used in case of ABS unit replacement or configuration loss (ex. battery flat)

Gateway

-ECU coding

In case of replacement of the gateway unit, the right coding code of the new unit shall be entered by means of this function (after reading the code from the old unit).

-Vehicle configuration setting

In case of replacement of the gateway unit, by means of this function the new unit shall be set with the exact equipment fitted on the vehicle (select the ECUs fitted on the vehicle).
This function is also useful in case of post-assemblies, in this case add the assembled ECU to the gateway configuration.
Since the gateway ecu is the unit that handles CAN messages, in order to ensure its proper operation, configuration of the vehicle equipment shall be set

Instrument cluster

ECU coding

In case of replacement of the instrument cluster unit, the right coding code of the new unit shall be entered by means of this function (after reading the code from the old unit).

Fuel consumption indication adjustment

This function allows for the adjustment of the evaluation of the consumption signal in percentage,
The correction affects the instantaneous consumption, average consumption, range and fuel level indication in the fuel reserve field.

Service modification from flexible to fixed for petrol and diesel vehicles (Fixed service intervals)

This control changes the service expiry mode from flexible to fixed

Service modification from fixed to flexible for petrol and diesel vehicles (Flexible service intervals)

This control changes the service expiry mode from fixed to flexible

Service interval reset

It allows for the service internal reset, to be performed every time engine oil is replaced

Language setting

It allows to change the language of instrument cluster messages

Fuel level indicator adjustment

This function allows for the adjustment of the fuel level indicator in order to correct any inconsistencies between the indicator and the actual content of the fuel tank; before executing this function, completely empty the tank and then inject 9 litres of fuel; after that perform the adjustment with a value causing the fuel low level indicator to turn on

Distance driven since last oil change

With this function the km value driven since last engine oil change can be changed, using this function is not recommended; only in case a previous service reset was not performed, follow the instructions below:
First perform the service reset and then change the km value using this function, entering the km value driven since the last oil change.

Days since last oil change

With this function the days since last engine oil change can be modified, using this function is not recommended; only in case a previous service reset was not performed, follow the instructions below:
First perform the service reset and then change the days value using this function, entering the approximate number of days elapsed since the last oil change.

New dashboard km/miles adjustment

With this function, the mileage shown on the replaced dashboard can be entered in a new dashboard; this function can only be used if the mileage shown on the new dashboard is less than 100 Km.

Driver /passenger / rear right / rear left door module

ECU coding

In case of replacement of the door module, the right coding code of the new unit shall be entered by means of this function (after reading the code from the old unit).

Outside mirror defroster adjustment (Driver door only)

By executing this function, outside mirrors defrosting disabling can be changed according to outside temperature; passenger side mirror data are changed as well

Parking Assistance System

ECU coding

In case of replacement of the Parking Assistance System, the right coding code of the new unit shall be entered by means of this function (after reading the code from the old unit).

Buzzer volume adjustment

With this adjustment, the operating buzzer when close to an obstacle can be changed

Buzzer tone adjustment

With this adjustment, the operating frequency when close to an obstacle can be changed

Electro-hydraulic system

ECU coding

In case of replacement of the Power Steering module, the right coding code of the new unit shall be entered by means of this function (after reading the code from the old unit).

Adjustment with Parking Assistance system

If the vehicle is equipped with Parking Assistance system, alignment between two ecus can be obtained by executing this function; execute this function in case of replacement of the servoassist control unit

Adjustment with steering angle inner sensor

Function to be executed in case of replacement of the servoassist control unit

Steering angle basic adjustment

This control shall be performed in case of steering angle sensor replacement or in case of misalignment (for ex. flat battery, vehicle level adjustment operations).

AirBag

ECU coding

In case of replacement of the Airbag module, the right coding code of the new unit shall be entered by means of this function

Enabling/disabling of Airbag and pretentioners

With this function, the following components can be enabled or disabled:
Driver side pretensioner
Passenger side pretensioner

Rear right pretensioner
Rear left pretensioner
Driver side front airbag
Passenger side front airbag
Driver side lateral airbag
Passenger side lateral airbag
Driver side head airbag
Passenger side head airbag

LRE steering column unit

ECU coding

In case of replacement of the Steering Column module, the right coding code of the new unit shall be entered by means of this function

EZE central electronics

ECU coding

In case of replacement of the EZE module, the right coding code of the new unit shall be entered by means of this function

Daytime lights coding

With this function, daytime lights are enabled or disabled in the central electronics, select the right option being proposed according to the vehicle equipment (MAXIM DOT, led daytime lights)

Enabling/disabling of tail lights with daytime lights

With this function, tail lights can be enabled/disabled in case of daytime lights on

Emergency brake light coding

This function allows for automatic activation of the emergency light system in case of emergency braking

Coming home/leaving home

By selecting these functions, you can enable/disable the headlights turning on up to 60 seconds after vehicle being locked by remote control (Coming home function) and the headlights turning on for some seconds after the opening of the vehicle by remote control (leaving home function); the values that can be selected are 0-60; when 0 is set, functions are disabled

Single door opening

With this adjustment, selective opening of vehicle's doors can be set with the following options:
°Single door opening
°General opening

Centralized automatic closing

With this function you can set automatic closing of doors with speed above 15 Km/h

Automatic unlocking upon ignition key extraction

With this function, you can enable/disable opening of central locking when the key is removed from the ignition block

Closing windows by remote control

With this function, automatic closing of power windows via remote control can be enabled/disabled

Acoustic signal confirming doors lock/unlock for vehicles equipped with MAXI DOT

With this function, the acoustic signal during opening and closing of the central locking by remote control can be enabled; adjustment only available for vehicles equipped with MAXI DOT.

Tilting sensor sensitivity

This function allows to change the anti-theft tilting sensor sensitivity within this range of values:
50 - 100 with intervals of 10

Volumetric anti-theft sensitivity

The functions allows to change the volumetric anti-theft sensitivity (with the following values: 50 - 100 - intervals of 10)

Anti-theft alarm setting

This setting allows to change the operation of the anti-theft alarm according to 4 different operating modes

Windscreen washer system, number of activations without headlight washing system activation

With this adjustment, you can change the number of activations of the windscreen washer system without the activation of the headlight washing system; values can be changed from 0 to 254

Footwell light intensity

The footwell light intensity can be changed within the following range of values: 0 - 100%

Direction indicator blinking upon doors locking

With this adjustment, you can enable/disable direction indicators blinking upon doors locking

Intermittent flashing cycles for comfort flashing

With this adjustment you can change the number of direction indicators flashes during door closing/opening

Remote controls learning

With this function, remote controls (up to 7 max.) can be learnt in the central electronics ECU

Remote keys erasing

With this function the remote controls learnt in the central electronics ECU can be erased, this function shall be used in case keys are lost. After that, execute the remote controls learning function to learn the remote controls still owned

Directional headlights / headlight level corrector

ECU coding

In case of replacement of the module, the right coding code of the new unit shall be entered by means of this function

Lights position adjustment

The function is used to adjust headlights height; execute this function and then mechanically adjust the headlight height by means of the specific adjuster, at the end the ecu will save the set position as default position.

Enable/disable lamp faults
Enable/disable faults of sensors
Enable/disable terminal 61 function
Enable/disable warning lamp
Rear limit adjustment: high/ low value
Front limit adjustment: high/ low value

Function to be executed in case of headlights adjustment ecu replacement (indicating the value of the replaced ecu is recommended)

MINI [2006]

Remote controls

Remote control coding

In case of replacement of the remote control battery or in case of keys replacement, the remote control learning function can be executed

TOYOTA AVENSIS [2009]

Power steering

Torque calibration sensor

Function to be executed after intervention on the power steering system, in case of replacement of components or in case of misalignment (ex. flat battery)

LAND ROVER DISCOVERY 3 [2005] - FREELANDER 2 [2006]
RANGE ROVER SPORT [2005]

Instrument cluster

Service reset by scantool

The function resets all service intervals by means of the scantool

BMW X3 E83 [2003] - X5 E53 [1999]

Transfer case

Instructions before replacing the transfer case ECU

The procedure to be followed in case of replacement of the transfer case ecu is described; execute the adjustment before replacing the ecu

Entry of values on the new ECU

After replacing the transfer case ecu, adjustment values of clutches and integrators shall be entered

Replacement of transfer case box

This adjustment shall be performed in case of replacement of the whole transfer case unit; the following operations are performed: Determination of classification resistor value and ECU adjustment and reset

Actuator replacement

Use this adjustment only in case of replacement of the transfer case actuator; the following operations are performed: Determination of classification resistor value - ECU adjustment and reset

Transfer case oil service reset

This adjustment shall be used in case of replacement of the oil contained in the transfer case; the following operations are performed: Reset of adaptive parameters concerning the quality of transfer case oil, ECU reset and reset of adaptive parameters of transfer case integrators

Classifier resistor replacement

Use this adjustment only in case of replacement of the classification resistor component; the following operations are performed: Acquisition of new classification resistor value and ECU adjustment and reset

CITROEN C5 X7 [2008]

Instrument cluster

Multi-function display language setting

With this adjustment, the language of the multi-function display can be changed

Dashboard setup

The following settings can be performed:
1. Progress bar tachometer, possible values for selection "Present" "Not present". The tachometer digital indicator displays in digital form the number of rev/min indicated by the bar-graph tachometer
2. Oil level indicator, possible values “Present” “Not present”: upon key contact on, oil level indication is displayed for 2 seconds

3. Service indicator, possible values "Present" "Not present": If "not present" is set, the service indicator is displayed in place of the total mileage upon key ignition on; if "present" is set, the service indicator shows the distance in km to be covered before the next service of the vehicle

CITROEN C8 [2005]

Body computer (configuration)

Service interval reset

It allows for the reset of the service interval via the scantool

Forcing fuel level measurement data

It allows for the alignment of calculated consumption in relation to fuel level; to be used in case of fuel level sensor replacement or in case of abnormal operation reported by the vehicle user

Body computer working mode

One can select between normal mode and Show Room mode; in Show Room mode, power supply to some units is disabled for energy saving purposes

Body computer security code programming

In case of Body computer replacement, the security code required for the subsequent key learning function shall be programmed

Key coding

It allows for key learning on a new Body computer unit or for the addition of a new key on an existing Body computer unit; this operation requires the entry of the security code

Remote control learning

It allows for learning of new or existing remote controls that are no longer aligned in the Body computer

Energy saving mode deactivation

It allows to disable the automatic activation of the energy saving mode which is activated some minutes after ignition on and engine off; when the energy saving mode is activated, some electric consumers of the vehicle are automatically switched off, thus reducing the electrical consumption of the vehicle's battery; when this function is disabled, electric consumers remain switched on. Disabling this function is not recommended as it safeguards the battery.

FORD FOCUS [2004] - C_MAX [2003]
EDI 1.6 TDCI DPF

MONDEO [2007] - S_MAX [2006]
EDI 2.0 TDCI DPF

Injector coding

With this function the injector code stamped on every single injector can be saved; by performing this adjustment, the ecu correctly calibrates the injection times for each injector with a view to optimizing regularity of operation and reducing pollutant emissions

Diesel particulate filter regeneration

Forced regeneration can be activated in case of particulate filter clogging

EGR valve adaptive parameters reset

In case of replacement or cleaning of the EGR component, learning the new operating positions of the component is required; default values of the manufacturing company will be restored

Throttle valve adaptive parameters reset

In case of replacement / cleaning, the component shall be adapted to the new operating condition

Particulate filter value reset

Function to be performed in case of particulate filter replacement

Reset of intercooler bypass valve position difference

Function to be executed in case of replacement / cleaning of the intake positioning motor assembly

Focus '04 and C_Max '03 only – Reset of engine cooling fan learnt values

Function to be executed in case of replacement of the engine cooling fan, thermostatic valve or engine temperature sensor; such control allows to restore in the engine ecu the typical basic diagram for fan management

Mondeo '07 and S_Max '06 only - Water in fuel indicator lamp reset

The function allows for the reset, in the engine ECU, of those parameters causing the water in fuel indicator lamp turning on, it is advisable to execute this function exclusively after replacement of the diesel filter and verification that no water is present in the fuel tank

Mondeo '07 and S_Max '06 only - Fuel dosing valve values reset

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It allows for the reset of adaptive parameters of the fuel dosing valve; it shall be performed in case of component replacement

Mondeo '07 and S_Max '06 only - Knock sensor values reset

It allows for the reset of adaptive parameters of the knock sensor; the function shall be performed in case of component replacement

FOCUS [2004]

FACM diesel additive control

Filling and pressurization of additive system

The DPF system implies the use of cerium oxide; in case of interventions implying the disconnection of system pipes or in case of replacement of system components (for ex. pump, tank, pipes, etc.) the system shall be reinitialized.

Diesel additive ECU substitution

Execute this function only in case of replacement of the diesel additive ECU

Additive tank filling

In case of additive tank top-up or filling, the function reinitializes the ECU with the new level

S_MAX [2006] - GALAXY [2006]

EPB electronic parking brake

Enabling of brake clamp opening maintenance mode

Function to be used in case of interventions on the parking brake system or before the replacement of brake pads, it disables the electric parking brake system

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Disabling of brake clamp closing maintenance mode

Function to be used at the end of interventions on the parking brake system or after replacement of brake pads, it re-enables the electric parking brake system

Reset of clutch engagement points

Execute this adjustment after interventions related to clutch replacement or following malfunction of the Hill Holder system; by executing this control, the clutch engagement point is cleared to allow for the adaptation of the ECU to the new clutch

Control unit configuration

Use this function after the replacement of electric or mechanical components of the parking brake system; by executing this control, the ECU's parameters are reset

Tilting sensor adjustment

Execute this adjustment to calibrate the vehicle tilting sensor, to be used in case of replacement of the component or in case or malfunction of the Hill Holder system

Electrical parking brake setting

Execute this function after maintenance operations implying the replacement of electric or mechanical components of the parking brake system; the execution of this control brings actuators to nominal activation position

Assembly check

This procedure allows to check that all mechanical components of the parking brake are correctly assembled; at the end of the procedure make sure no fault is present in the fault memory

AUDI A1 8X [2010]
EDI 1.6 CAYB engine

VOLKSWAGEN GOLF VI 5K [2008]
EDI 1.6 CAYC engine

ECU coding

In case of replacement of the engine control unit, the right coding code of the new unit shall be entered.

Injectors coding

With this function the injector code stamped on every single injector can be saved; the ecu correctly calibrates the injection times for each injector with a view to optimizing regularity of operation

Reset of differential pressure sensor learnt values

In case of replacement of the component, values reset allows for the ECU re-calibration on the operation of the new component
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Exhaust gas recirculation valve (EGR) adjustment

In case of replacement or cleaning of the EGR component, learning the new operating positions is required

Particulate filter regeneration, vehicle at standstill

In case of particulate filter clogging, forced regeneration can be activated

Particulate filter regeneration, vehicle moving

This function executes the regeneration with vehicle moving; this function should be preferred as high temperatures being generated during regeneration can be more easily dissipated by the airflow.

Fuel circuit filling

Function to be used after intervention on the diesel hydraulic circuit or in case of replacement of components (for ex. high pressure fuel pump, injectors, fuel filter, etc.)

Reset of injectors learnt values

Reset is required in case of replacement of one or more injectors; the ECU will then adapt the injection time on the new units
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Oxigen sensor adaptation values reset

In case of lambda probe replacement, correction values shall be reset

Exhaust gas turbocompressor adaptation

In case of replacement, adaptation of the new turbocompressor is required to allow for the ecu to correctly manage the overboost characteristic curve

Throttle valve adaptation

In case of replacement / cleaning, the component shall be adapted to the new operating condition

Particulate filter initialization

Function to be performed in case of particulate filter replacement

Reset of flow regulation valve and pressure regulation valve self-adaptive parameters

The function shall be used in case of replacement of the high pressure pump or in case of replacement of the regulation valves

Engine idle speed adjustment

It allows for idle speed adjustment; use it to correct irregular engine operation at idle speed

Adaptation of transmission neutral position sensor (Start&Stop)

For vehicles with manual transmission, the sensor acknowledges the transmission neutral position to correctly manage the Start&Stop function; the function shall be executed in case of sensor replacement or in case of system malfunction.

Enabling/disabling of Start&Stop function

With this adjustment, the Start&Stop function can be enabled or disabled