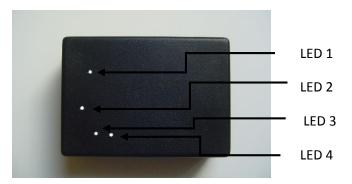
Parallel mounting method PLT cable NOX or NOX + pump testing mode:

Needed device equipment:

1. Device main PCB:





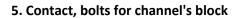
2. Add-on PCB:



3. PLT cable:



4. Resistance (required for pump testing only)









ATTENTION!!! Before installing the device in Full mode, it is necessary to activate Cotel (FMS) interface using the diagnostic tool, otherwise possible device malfunctions. The device receives FMS data or not can be judged by LED2 indicator. Read User's Manual Table 7.

Installation procedure:

All installation work carried out with the ignition switched off.

1 step. Open the main PCB housing and install an add-on PCB

The main PCB with an open housing

Add-on PCB should be mounted on the main PCB



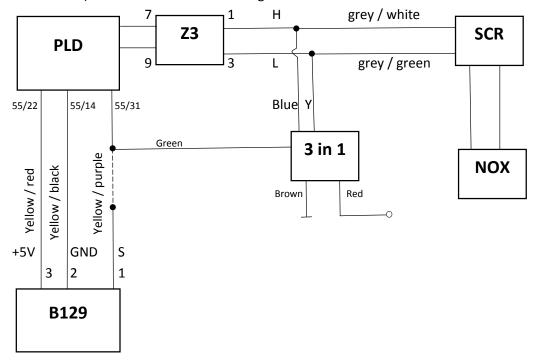


Circuit diagram of the device connection, which illustrating the parallel connection for the Full mode:

When installing in this way the cables by the colors can be connected to the OBD connector:

2 step. Solder wires to the OBD connector according to the following scheme:

1. Parallel connection scheme (Test mode when the AdBlue pump and / or NOX sensor malfunction). Connect the wires according to the scheme:



AdBlue pressure sensor

B129 – AdBlue pressure sensor

PLD – an engine control unit

Z3 – CAN bifurcation point (STAR point)

3 in 1 - Gudraks 3 in 1 device

SCR - SCR control unit

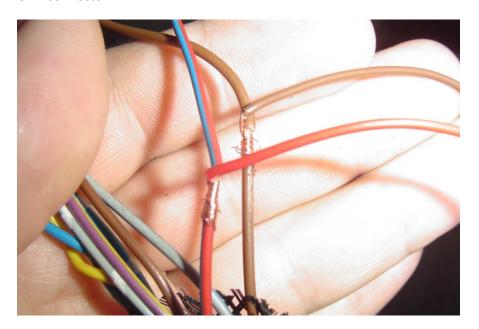
NOX - NOX sensor

Table 1

Device 3 in 1	Connection place	Note
Brown	OBD connector, brown cable	31 kl., frame
Red	OBD connector, red/blue cable	30 kl., constant "plus"
Yellow	Z3, 3 contact, connector side	CAN1_L, PLD side
Blue	Z3, 1 contact, connector side	CAN1_H, PLD side
White	Unused	CAN2_L, SCR side
Black	Unused	CAN2_H, SCR side

Green	PLD unit, yellow/purple, 31 contact,	Adblue pressure sensor out
	big connector	

OBD connector



 ${\bf 3}$ step. Disconnect the original NOx sensor by trimming cables or disconnecting the connection:



Attention!!!! Never leave a plugged on the original NOx sensor when you use a parallel mounting method!!!

4 step. Installing the appliance NOx sensor test mode finished, if necessary pump testing mode read bellow, otherwise check the device performance and installation work is complete:

LED1 – must flash in blue with 1000 ms interval;

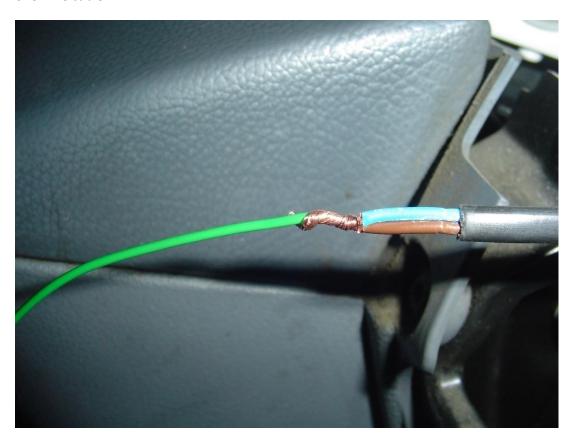
LED2 - must flash in blue;

LED3, LED4 – must flash in green.

It is advisable to check the SCR system functions using a diagnostic device.

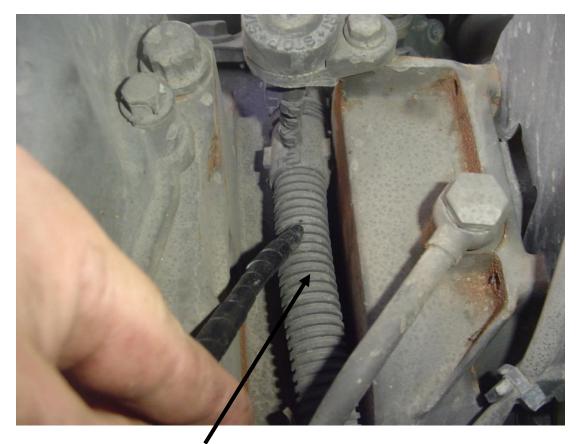
If you notice other LED flashing / lighting options, read the main instruction.

5 step. Install the cable (need cable 4 meters length) from the pressure sensor to Gudraks 3-in-1 device and connect to the green Gudraks 3-in-1 cable. In the photo installed a two-wire cable, but enough only one-wire cable:



Pressure sensor cable can be found under the cab on the engine near the start / stop switch:





6 step. In this cable of wires we find a yellow wire with a purple ribbon, cut it and connect the cable which comming from the engine control unit (PLD) side. An advice. You can lead two wires and other

wire connect to a pressure sensor side. Then, when you need to unplug, it will be enough just a short-circuit the two ends of the wires which is next to the Gudraks 3in1 device (there is no need to raise the cab or go under the vehicle)

Pressure sensor wire can be connected next to the engine control unit (PLD): yellow with purple cable, 31 contact in major connector:



Adblue pressure sensor:



7 step. Block Adblue pump channels so that will stop Adblue liquid:

Block this channel (supply to the pump):



For a channel block is used this type screws:



8 step. After that block the exit channel of the pump:



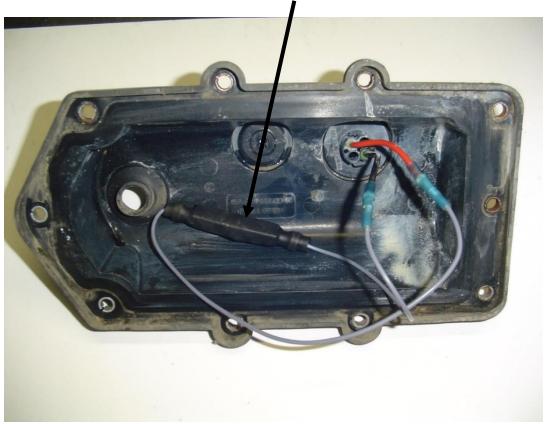
In the photo below are nozzles in which are built-in bolts, which blocks the channels:



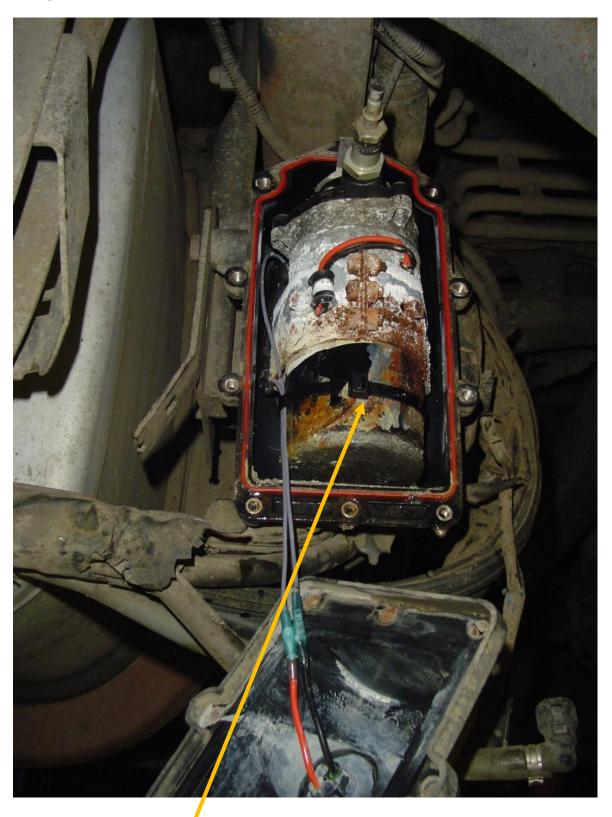
9 step. Remove the pump cover and disconnect the pump by trimming wires:



10 step. Mount the pump load (resistance):



11 step. Insert the resistance of the pump inside the cap, so that it will protect against mechanical damage:



Tie resistance with straps.

12 step. Put a cap and connect hoses.

13 step. After installing, check the device work:

LED1 – must flash in blue with 1000 ms interval;

LED2 – must flash in blue;

LED3, LED4 – must flash in green.

It is advisable to check the SCR system functions using a diagnostic device.

If you notice other LED flashing / lighting options, read the main instruction.