

## **TDDi Fuel injection pump (FIP) information**

**<http://www.obdtester.com/focom>**

This is PRELIMINARY WORKING DRAFT for SECONS Ltd. internal use and FoCOM users.  
*Please excuse the typos and errors.*

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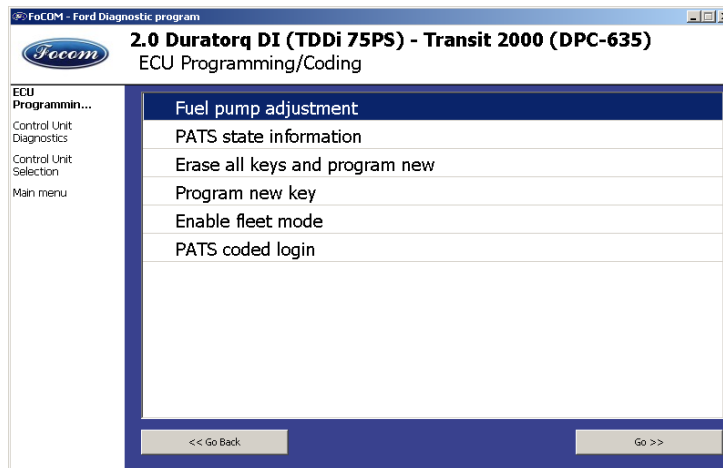
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## Fuel pump adjustment



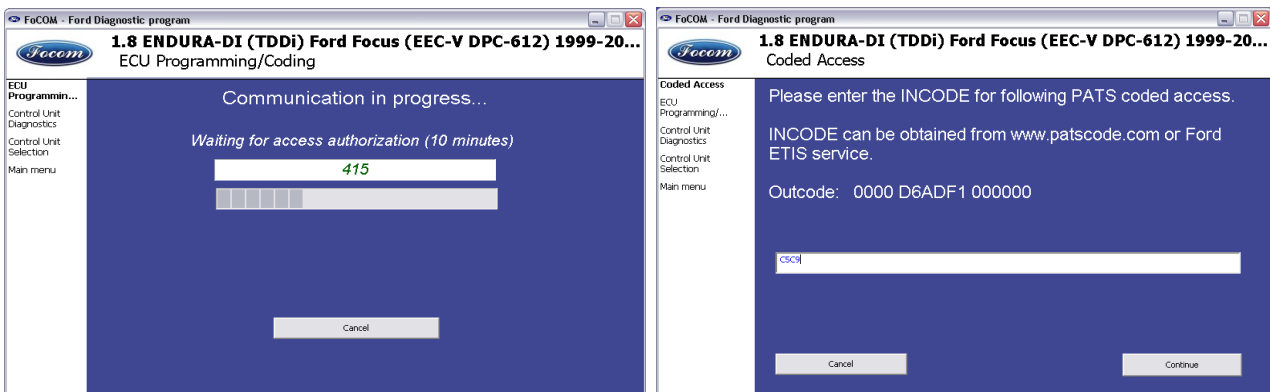
Information about unadapted fuel pump is displayed as an fault code B2139 (or U2510, B10DA-61). The pump is adjusted by OBD2 diagnostic connector.

Connect to the engine control unit (PCM) by FoCOM. Function *Fuel pump Adjustment* can be found at the menu *ECU Programming/Coding*. Selection of any other coding functions such as PATS login, delete keys, etc., is not needed for fuel pump adjustment.



If you cannot find *Fuel pump adjustment* function in menu, please send us file with fast snapshot (go to the menu *Control Unit Identification* a click button *Save ECU Information*), part number of ECU (xxxx-12A650-xx) and the VIN code on address [info@secons.com](mailto:info@secons.com). A function will be added.

For the adjustment is necessary to go through two steps related to PATS. First is in the PCM and second in the pump. The program performs these steps automatically. Type of access in first step in PCM is either timed or coding, it depends on type of the control unit. More information about PATS can be found in the relevant documents.



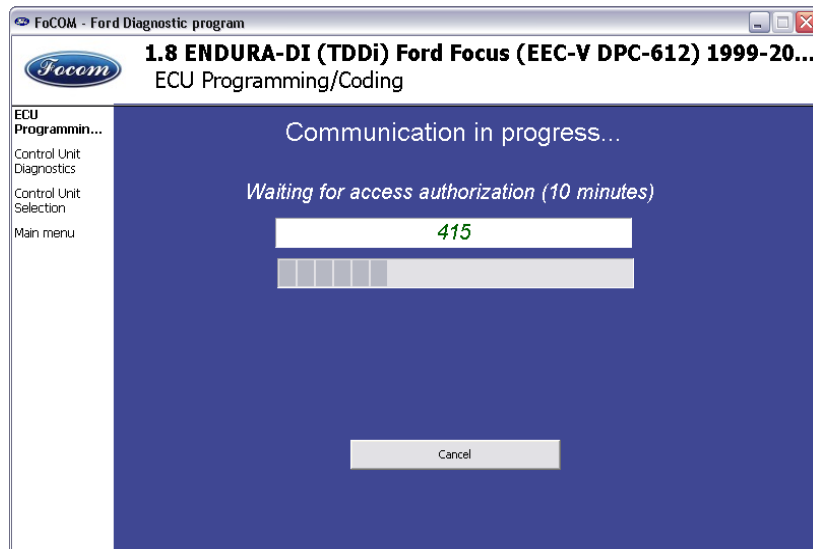
The left picture shows the timed access.

The right picture shows the coding access demanding INCODE.

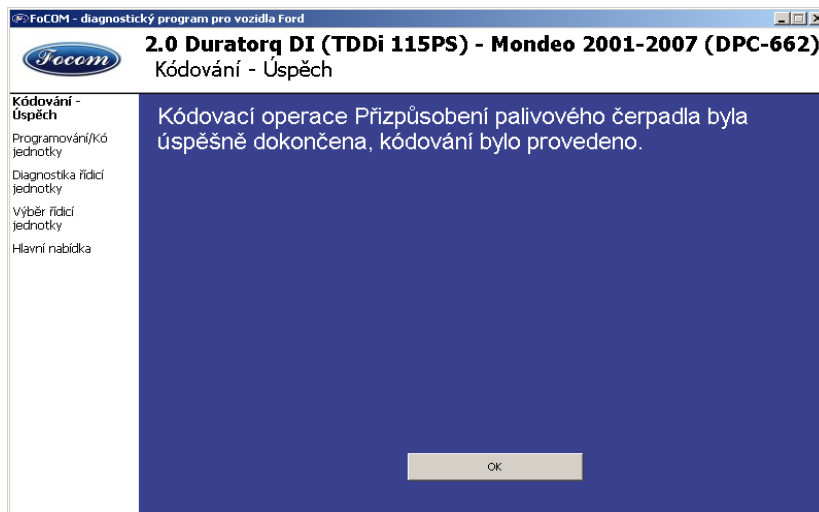


Remember that for every OUTCODE, which a control unit generates, is necessary to get a unique INCODE. Using one and the same INCODE during more operations with PATS is not possible.

After typing a valid INCODE (or after waiting for time access), application go to the second step also related to PATS in the pump.



Waiting for access to the pump



Information about successful adjustment



As mentioned above, both accesses are very often timed.

In practice, you can also meet with the state of the pump, which do not require a second step.

If the adjustment fails, please save the debug log and send it to [info@secons.com](mailto:info@secons.com), this procedure is described in the user manual.

## Diagnostics of Bosch PSG

FoCOM supports the diagnostics of pumps of TDDi engines from the manufacturer Robert Bosch GmbH. These pumps have not plugged their diagnostic pin into the OBD2 socket, it is important to connect diagnostics directly to pin of control unit. Ford IDS doesn't contains features that allows diagnosis of this type of control units.

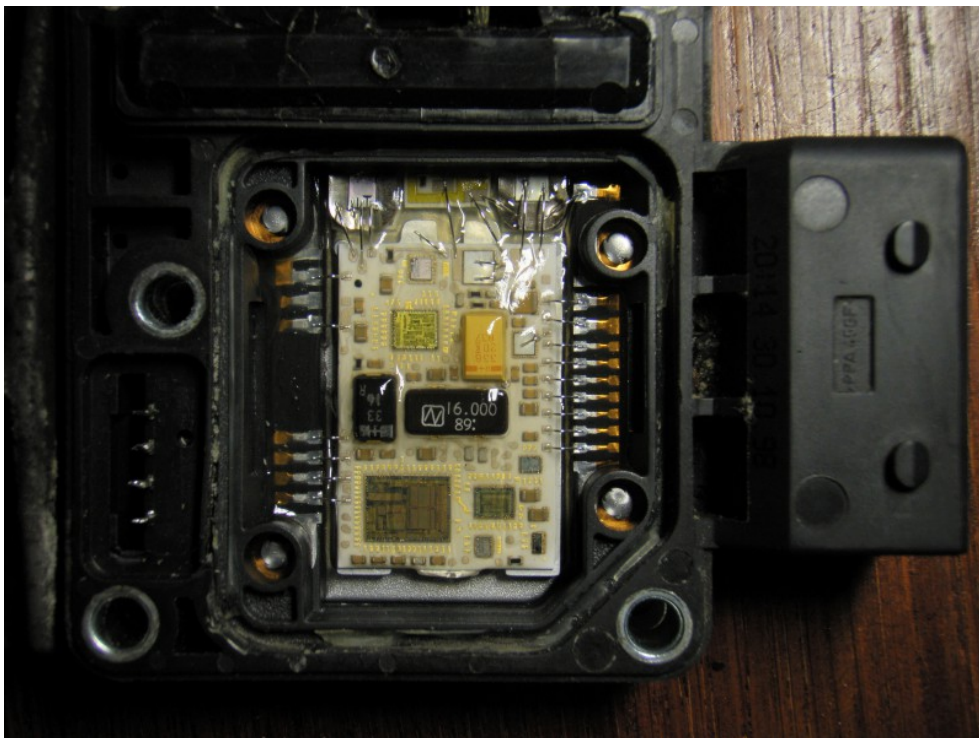
### Connector

For diagnostics of pump is necessary the direct connection from PIN9(Kline) in the ECU to PIN7 in FoCOM diagnostic interface.



### Pump control unit description

The control unit of pump contains only a hybrid circuit board, which is not repairable in normal work conditions. Consumption of the ECU can be up to 8A, it is necessary to get connected to a fused wiring.



## Diagnostics

Diagnostics of pump is available from the main menu of FoCOM by clicking on “Special Diagnostics” and then selecting “Fuel Injection Pump Diagnostics”.

