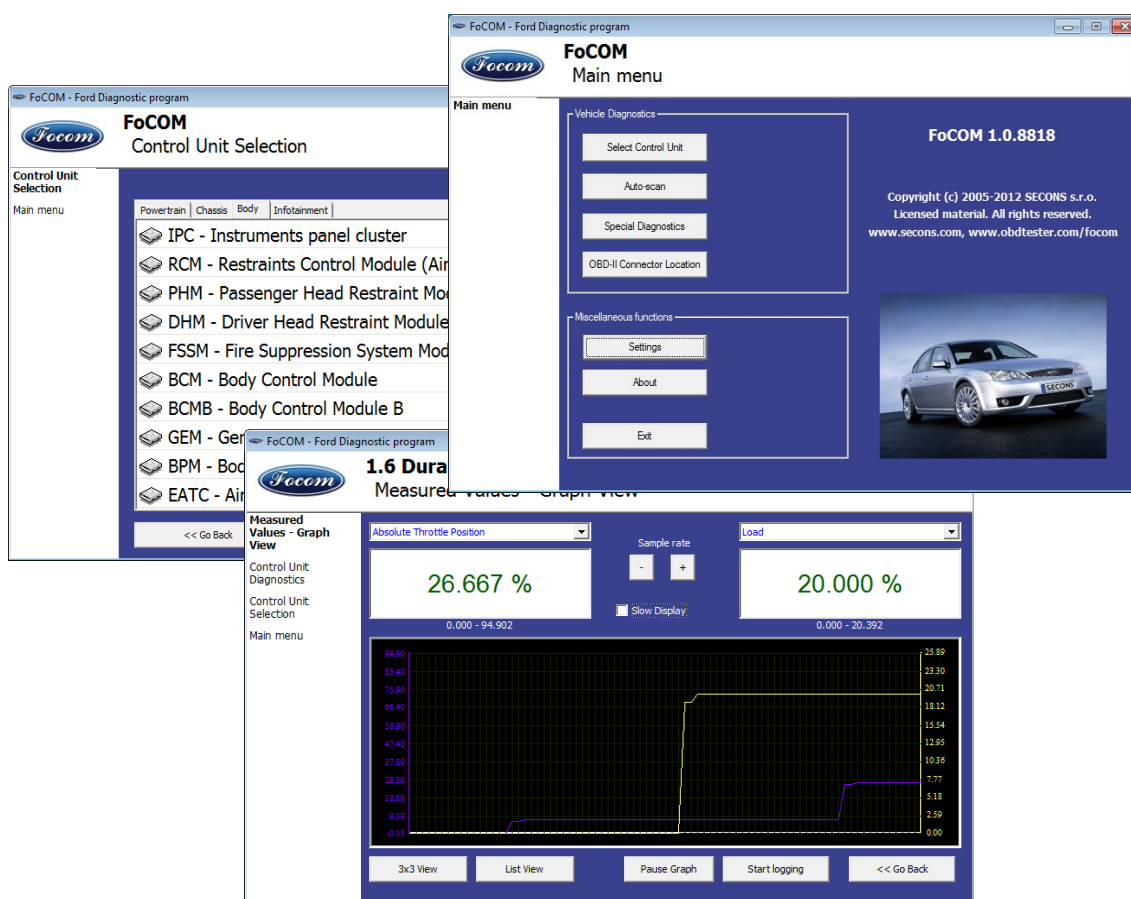


FoCOM

User manual





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Please read carefully this user manual before using the FoCOM application.

Before using the software please read license agreement.

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1 Introduction

Thank you for purchasing the FoCOM diagnostic interface and software. FoCOM is professional tools for diagnostics of Ford vehicles. Please read carefully this User Manual before using the product. If you have experience with original diagnostic tool Ford IDS, we recommend you to study chapter comparing both systems .

We hope you'll find our products useful. In case you have any questions, problems or feedback please contact as at support@secons.com. We're here to help!

1.1 Key features

- FoCOM covers for wide range of ECUs and models.
- Easy connection via smart multiplexing USB to OBD2 interface
- Wide range of communication protocols and buses covered incl. J1850 PWM, ISO, CAN
- Automatic ECU recognition
- Automatic vehicle scan
- ECU Identification
- Fault code (DTC) reading
- Fault code clearing
- Measured values / live data
- Live data recording
- Diagnostic protocol printing
- Actuator tests
- Coding functions
- Control unit configuration
- Printing
- Logging

The FoCOM system works with Ford vehicles. It works as well with Ford subsidiaries vehicles such as Mazda, Lincoln, Mercury, Jaguar, but without guarantee of 100% functionality. The rule of thumb is: tasks related to fault code memory and identification are reliable everywhere, but measured values and other functions may not be fully supported.

1.2 Software updates

Updates of purchased software version are available for free download at <http://obdrus.ru/magazin/product/focom-ford-obd-scanner> . User name = serial number of FoCOM diagnostic interface. Password leave blank. The serial number can be found on a silver label of the interface or in settings of FoCOM after performing "Test interface". We recommend you to install updated version at least once a month, because updates provide support for new ECUs and fix various issues.

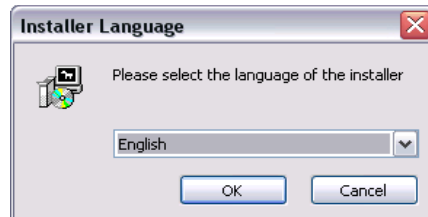
SECONS

We recommend you to update firmware in diagnostic interface by clicking on *Settings* → *Upgrade firmware* every time you update the software.

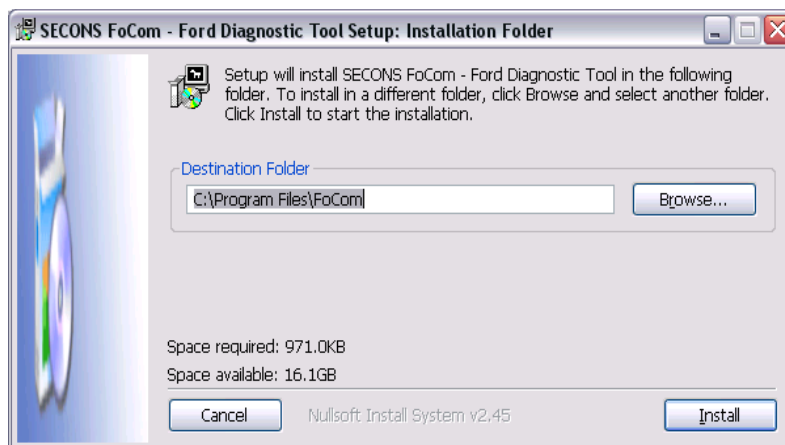
2 FoCOM software and driver installation

2.1 Microsoft Windows operating System

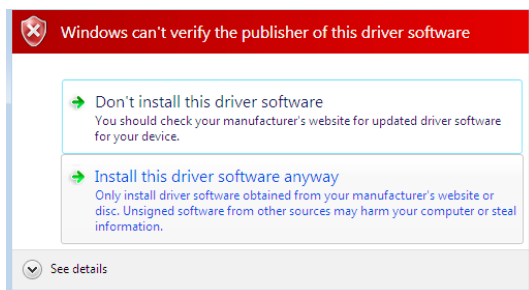
1. Insert FoCOM installation CD to your CD-ROM drive
2. Run installation file FoComSetup.exe
3. Choose language for the installer



4. Choose your destination folder for the FoCOM and click on *Install* button and after successful installation click on *Close* button.



FoCOM drivers are automatically updated during the FoCOM installation. When prompted to install „unsigned“ drivers, click on *Install this driver software anyway* (Microsoft® Windows® 7) or *Continue Anyway* (Microsoft® Windows® XP.).



Microsoft® Windows® will automatically install drivers when you plug-in the FoCOM to USB port. Driver installation isn't required for operation on GNU/Linux system.

2.2 Microsoft Windows 8 driver installation

In case of problem with installing drivers on Windows 8 64-bit, please follow these steps:

1. Press Windows Key + R
2. In the window that appears, type: "shutdown.exe /r /o /f /t 00"
3. Press "OK" button
4. The System will restart to a "Choose an option" screen
5. Select "Troubleshoot" from "Choose an option" screen
6. Select "Advanced options" from "Troubleshoot" screen
7. Select "Windows Startup Settings" from "Advanced options" screen
8. Click on "Restart" button
9. System will restart to "Advanced Boot Options" screen
10. Select "Disable Driver Signature Enforcement" (press number on keyboard for option shown on screen)
11. Once the system starts, install the diagnostic interface drivers as you would on Windows 7



Windows Vista & 7 required signed all .sys files (we use usbser.sys shipped by Microsoft with valid digital signature). Final version of Windows 8 requires also signed .inf file (which is not in our case). The above procedure helps to override unsigned .inf file. Once driver is installed, the program will work properly.

2.3 GNU/Linux System

Our diagnostic application are tested to work under Linux. The applications can be run under Linux, BSD or Apple OS/X on Intel x86 using Wine environment. The installer and applications perform fully automated installation under these operating system.

2.3.1 Requirements

- Linux 2.6.x with USB support (or FreeBSD)
- USB CDC Driver
- Wine 1.0.1

Recent Debian Linux or Ubuntu meet the above requirements.

2.3.2 Setting up devices

Driver installation isn't required for operation on GNU/Linux system. Diagnostic applications require access to /dev/ttyACMx devices from Wine environment. This can be set-up very easily using these commands:

```
ln -s /dev/ttyACM0 ~/.wine/dosdevices/com5
ln -s /dev/ttyACM1 ~/.wine/dosdevices/com6
ln -s /dev/ttyACM2 ~/.wine/dosdevices/com7
ln -s /dev/ttyACM3 ~/.wine/dosdevices/com8
```

Diagnostic interface should be then visible from the FoCOM diagnostic application.

2.3.3 Installation

Programs can be installed by launching setup .exe file using wine, e.g. `wine FoCOMSetup.exe`.

3 Diagnostic connectors used in Ford vehicles

Location of diagnostic connector (database of vehicle images) is available from main menu of FoCOM.

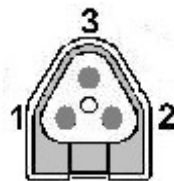
3.1 2-pin



Is used only for diagnostics of older vehicles by DCL/CART protocol.

3.2 3-pin

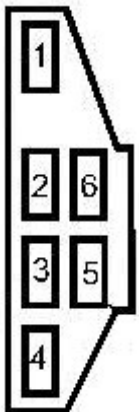
1	GND
2	DCL
3	DCL



This connector is used only for diagnostics of older vehicles by DCL/CART protocol.

3.3 6-pin

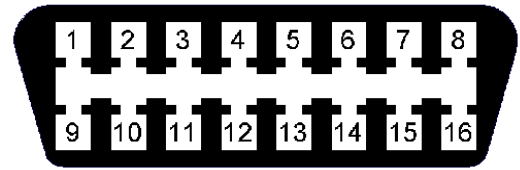
1	
2	
3	
4	
5	GND
6	



This connector is used only for diagnostics of older vehicles using DCL/CART protocol.

3.4 OBD-I

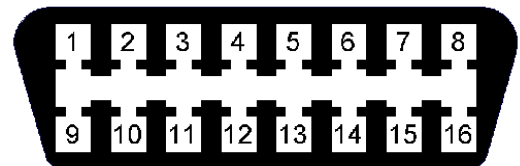
	1	9	
	2	10	
Ford DCL Bus +	3	11	Ford DCL Bus -
Chassis ground (GND)	4	12	
Signal ground (GND)	5	13	
	6	14	
ISO9141 K Line	7	15	ISO9141 L-Line
	8	16	



This connector is used only for diagnostic of older vehicles by DLC protocol, connector is compatible with OBD-II connector.

3.5 OBD-II

	1	9	
SAE J1850 Bus +	2	10	SAE J1850 Bus -
MS CAN High	3	11	MS CAN Low
Chassis ground (GND)	4	12	
Signal ground (GND)	5	13	Flash. Pgm. Volt.
HS CAN High	6	14	HS CAN Low
ISO9141 K Line	7	15	ISO9141 L-Line
	8	16	



Diagnostic connector is mandatory in all vehicles after 2000, is used from 1996.

4 Information about Ford control units

Every vehicle after 1996 contains at least one ECUs (Electronic Control Unit), powertrain control unit (PCM) is present every time, in modern types also ABS, RCM(Airbag), perhaps even IPC(Instrument Panel Cluster), BCM (Body Control Module) and many others.

Important notice for Jaguar diagnosis: due to differences and incompatibility between addressing schemes used Jaguar and other FoMoCo vehicles some Jaguar ECUs may have different function.

FoMoCo ECU	Jaguar ECU
RPSDM – Rear passenger sliding door module	Heater module (Webasto heater)
ILCM – Illuminated Light Control Module	Tire Pressure Monitor
SASM – Steering angle sensor module	Passenger Seat Module

4.1 Ford ECU terminology

PCM	Powertrain Control Module
ICU	Injector Control Unit
TCM	Transmission Control Module
EPS	Electronic Power Steering
IPC	Instrument Panel Cluster
HEC	Hybrid Electric Cluster (same as IPC)
RCM	Restraint Control Module – airbags, etc.
ECS	Restraint Control Module – same as RCM
BCM	Body Control Module
GEM	General Electric Module
PATS	Immobilizer (Passive Anti-Theft System) – also part of PCM/BCM/IPC/RKE
RKE	Remote Keyless Entry

4.2 Communication protocol

Protocol	Bus	Production
DCL (CART)	DCL (RS485)	1988 – 1996
Ford SCP	SAE J1850 PWM	1996 – 2005
Ford ISO	ISO9141	1996 – 2008
ISO 15765	CAN-BUS (ISO 11898)	2003 – present
UDS (ISO 14229)	CAN-BUS (ISO 11898)	2008 – present

4.3 The most common PCMs

Gasoline: EEC-IV, EEC-V, EEC-VI, EEC-VII, SIM21, SIM22, SIM24, SIM28

Diesel: EEC-V, SID802, SID803, SID804, Delphi, BOSCH EDC16

4.4 PATS – Immobilizer (Passive Anti-Theft System)

PATS is vehicle immobilizer used in Ford vehicles since 1998. PATS functionality is present in PCM, IPC, BCM or separated PATS ECU, according PATS version.

Ford uses Texas Instruments or Texas Instruments Crypto transponders (vehicles since 2001). Several generations of PATS are used.

Operations with PATS are authorized by timing access (delay before operation is allowed, so called Timed PATS) or by entering INCODE (Coded PATS). For coded PATS ECU generates OUTCODE, for which you need to enter correct INCODE. INCODE depends on OUTCODE



OUTCODE and consequently INCODE are time dependent, these are not fixed codes.

INCODE authorization service is available on www.patscode.com or you can use Ford ETIS.

4.5 Diagnostics of TCM and ICU



Automatic Transmission Control Unit (TCM) can be diagnosed via PCM.

Injector Control Unit is always diagnosed from PCM.

4.6 Diagnostic of Ford Galaxy and Ford Ka

Ford Galaxy I (1995-2000) Ford Galaxy II (2000-2006)	Both generations were manufactured as a joint venture product between Ford and VW. You need use VCDS software (former VAG-COM), VAG1552 or VAS5052 to diagnose them.
Ford Galaxy III (2006-present)	Can be diagnosed by FoCOM in standard way.
Ford Ka I (1996-2008)	Can be diagnosed by FoCOM in standard way.
Ford Ka II (2008-present)	You need use Fiat Examiner or FiCOM or to diagnose them. This vehicle is manufactured as a joint venture product between Ford and Fiat.
Land Rover Freelander (97-06)	You need use BMW diagnostic tool such as BimCOM.
Land Rover Range Rover (94-05)	You need use BMW diagnostic tool such as BimCOM.

5 Preparation to diagnose

Before starting diagnosis, make sure that car ignition is turned ON. Connect your FoCOM diagnostic interface to PC / laptop via USB. Interface test in settings of FoCOM must pass successfully (more information in chapter [Settings](#)). Connect your FoCOM diagnostic interface to OBD-II connector in the vehicle. You can find the OBD-II connector using FoCOM [OBD-II Connector Location](#) image database.

6 FoCOM main menu

FoCOM main menu is divided into two parts → Vehicle diagnostics and Miscellaneous functions. Descriptions of single functions are given below.



6.1 Select Control Unit

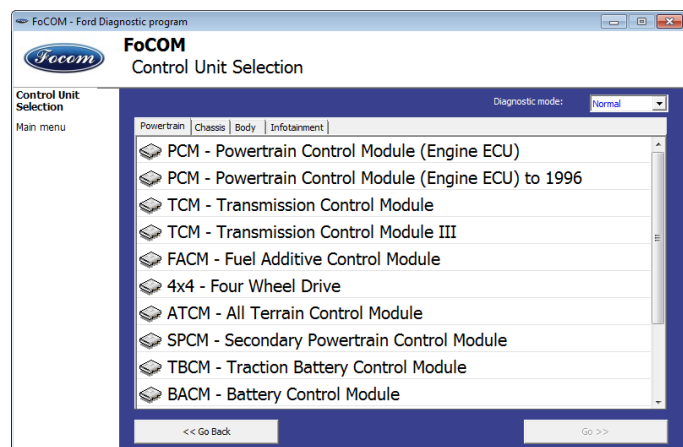
This function will display a complete list of control units. You can select and connect to the specific control unit you wish to diagnose.

It is common that low-cost vehicles have only a few control units e.g. PCM, ABS, IPC and RCM.

All control units present in tested vehicle can be detected by [Auto-scan](#) function.

If control unit was recognized, you can use diagnostic functions.

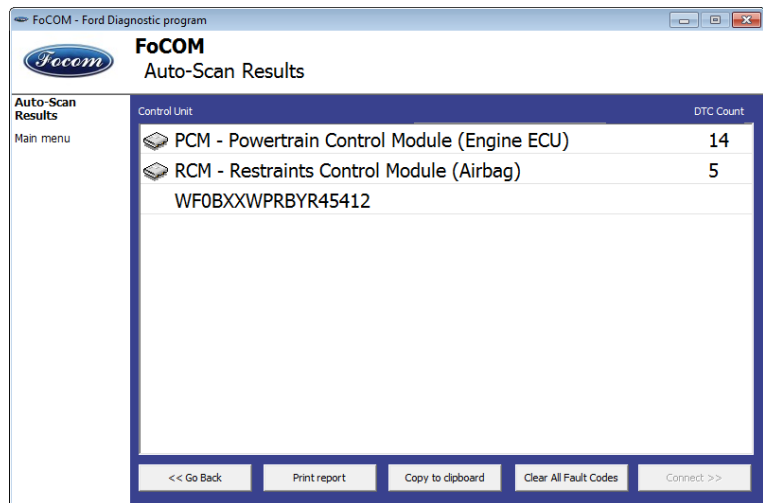
In other case, you should study chapter [Unrecognized Control Unit](#) before using diagnostic functions.



6.2 Auto-scan

This function scans for all known ECUs and shows the list of ECUs present in vehicle along with number of diagnostic trouble codes.

This function is identical with Network Test function in IDS.



Count of fault codes in auto-scan results is for some types of control units just approximate, or may not be supported (then will be zero count displayed for each ECU).

Please always read relevant values using "Read Fault Code Memory" function after connecting to each ECU.

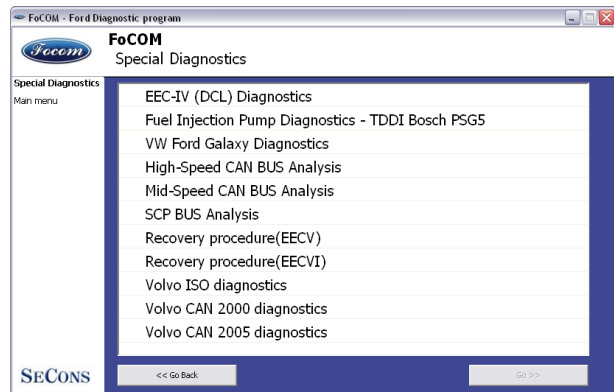
6.3 Special Diagnostics

Using special diagnostics you can perform the following special diagnostic tasks.

EEC-IV (DCL) Diagnostics – a diagnostics for old EEC-IV control units used in Ford vehicles to 1996 (up to 1998 for Ford Escort).

Fuel Injection Pump Diagnostics – TDDI Bosch PSG5 – diagnostic procedure described in our manual “Ford Fuel Injection Pump (FIP) coding” available at obdrus.ru

VW Ford Galaxy Diagnostics – special diagnostics for Ford Galaxy produced by Volkswagen to 2005.



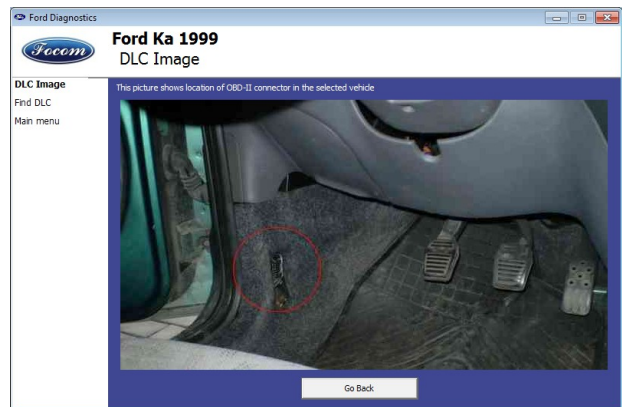
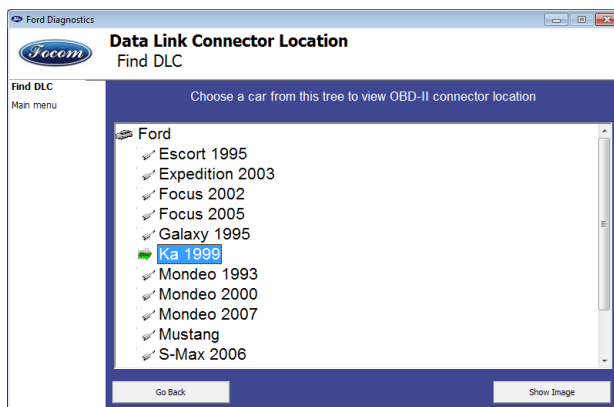
High-Speed CAN BUS Analysis, Mid-Speed CAN BUS Analysis, SCP BUS Analysis – these functions are described in our manual “CAN-BUS analysis information” available at www.obdrus.ru

Recovery procedure (EECV/VI) – this function is used to recover control units after wrongly performed flash programming.

Volvo ISO / CAN 2000 / CAN 2005 diagnostics – more information can be found at obdrus.ru

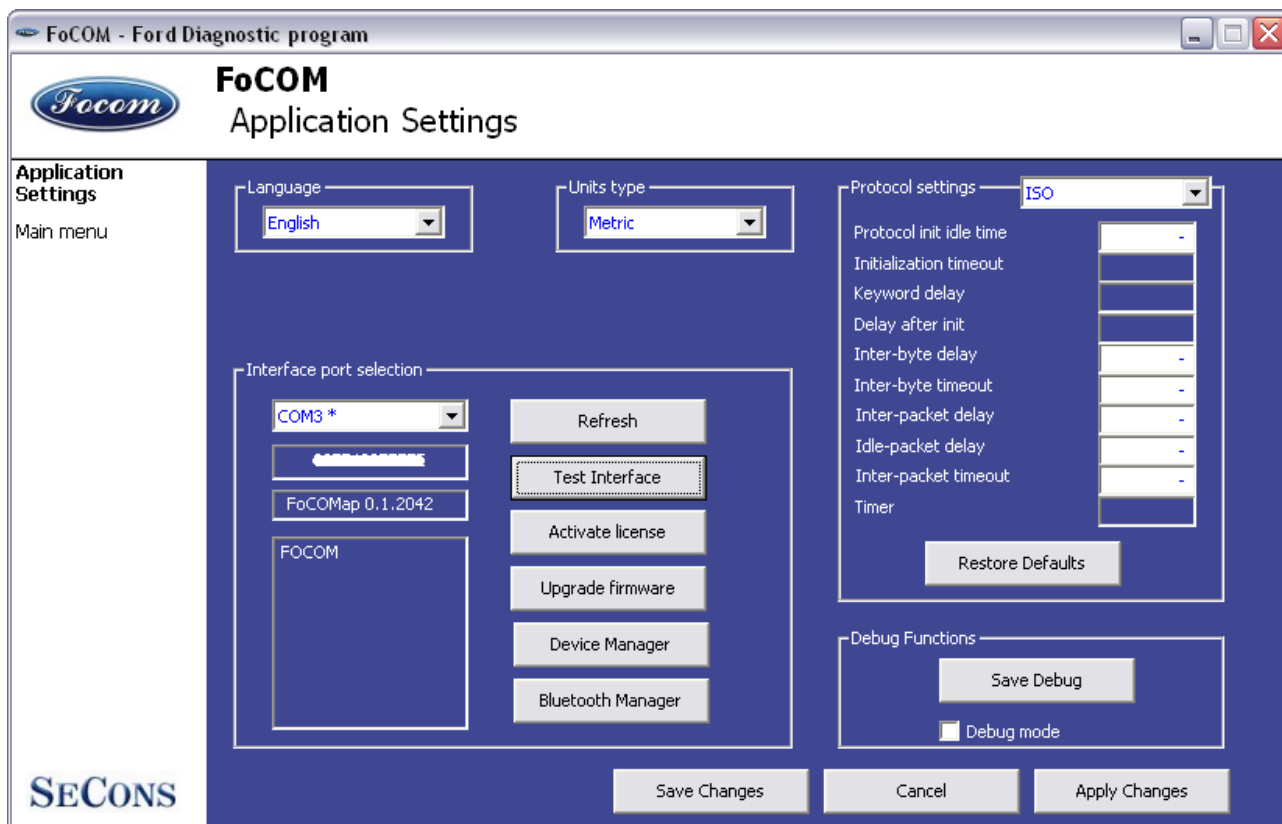
6.4 OBD-II Connector Location

Using this database you can check a location of OBD-II connector in the vehicle. The database is constantly updated.



6.5 Settings

All functions in settings are described below.



Language

Choose language of FoCOM user interface in the drop down menu.

Units type

You can choose metric or imperial unit system for measured values.

Interface port selection

Refresh - this button refreshes COM port selection drop down list. Correct COM port number should be already chosen after connecting diagnostic interface via USB to PC and clicking on *Refresh* button. If not, choose correct COM port number from the list. It is needed in order to perform successful interface test.

Test interface – before each use of program, please test proper function of your connected interface by clicking this button. After successful test, you can see a serial number of your interface displayed below the COM port field, then firmware version and information about active licenses.

Activate license – this button is used for activating new license/s to use the program or special functions. Internet connection is required. Standard license is already activated for all interfaces before purchase.

Device Manager – is used to finding out correct COM port number, or to reinstall drivers. Your device appears as “ELM-USB Interface (COMx)” under “Ports (COM & LPT)”.

Bluetooth Manager – is a preparation to upcoming bluetooth feature. The button is currently inactive.

Protocol settings

You can set various timings for each communication protocol. This is advanced feature used for example when problems occur with connection to control unit caused by slower ECU response and the like.

Restore Defaults – this button restores all modified timings of all protocols to default values.



Changing protocol settings is not required before normal use of the program. You will be asked to make changes by our tech. support when solving your issue at support@secons.com if necessary.

Debug functions

By clicking on **Save Debug** button, you can capture the latest data from elapsed communication between control unit and program into one file. Providing this file is required only by our technical support. Based on these data, we are able to monitor the whole process of performed operation and its correctness.



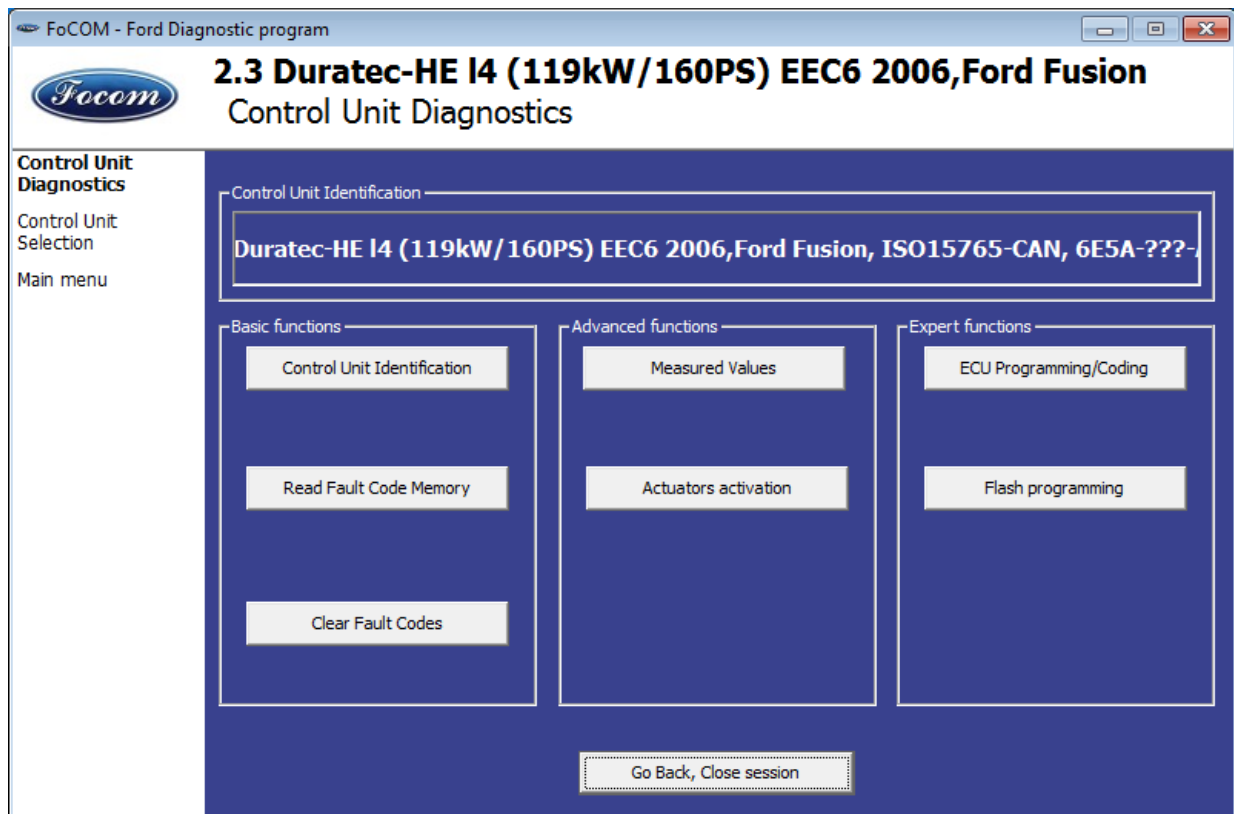
Use of debug function is important for successful resolution of any program failure or verifying its causes. For more information on how to proceed, please read the following chapter [#9.Reporting bugs and improvement requests](#).

6.6 About

After clicking on “About” button, you can read a license agreement or check application version.

7 Diagnostic functions

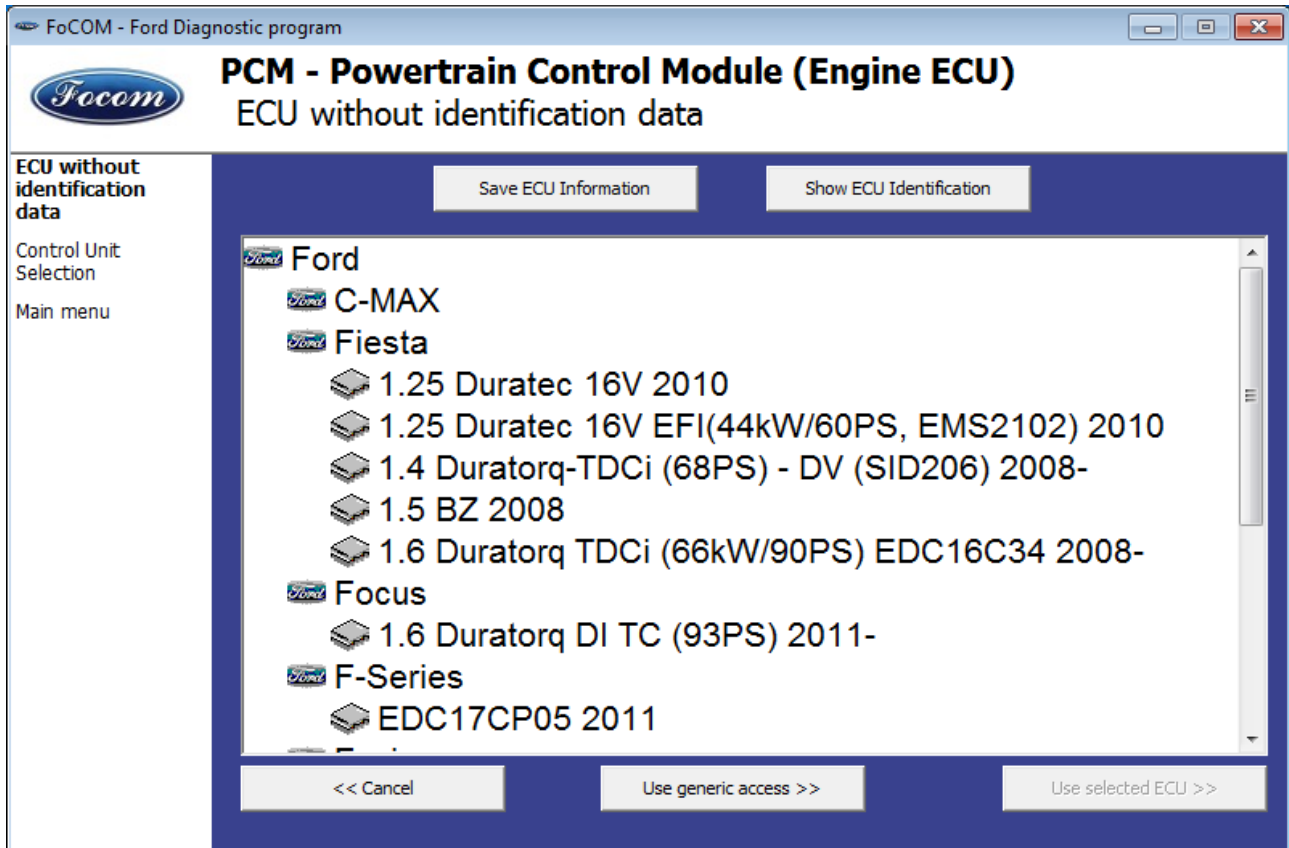
After connecting to chosen control unit, the following diagnostic menu is displayed. The diagnostic menu is divided into three parts. Basic functions, Advance functions and Expert functions.



If control unit was recognized, the diagnostic menu will be available immediately and you can use diagnostic functions. If control unit wasn't identified uniquely, you should study next chapter [Unrecognized Control Unit](#) before using diagnostic functions.

7.1 Unrecognized Control Unit

Some Ford control units may do not return unique identification or FoCOM may not correctly identify them. In such case is it necessary to choose the right type of the control unit from list.



In this situation, you can also use generic ECU mode by clicking on *Use generic access* button, however this mode will not allow you to read measured values.

You can get more information about ECU by clicking on *Show ECU Identification* button.

Some ECUs (especially those before 2003) don't contain identification data, therefore *Unrecognized Control Unit* information will **always** appear.



- You should necessarily choose right ECU for correct measuring of measured values.
- If you make mistake in identification, you shouldn't make any programming functions.

Function "*Save ECU Information*" make possible to save all development information about ECU to hard disc. In case that:

- the installed ECU is not available in the listing
- or you are not sure which control unit to choose

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- or you wish to get the ECU automatically properly identified in next FoCOM version
- or you just want to help us to improve FoCOM

We will be more than happy to add support for any unsupported or unrecognized control unit to next FoCOM version. We are usually able to do this within one or two working days based on so called “ECU snapshot file”

From “Unrecognized ECU” window or “Control Unit Identification” window please choose “Save ECU Information” button. When prompted if you want to perform fast or full snapshot please choose “No” in order to make fast snapshot (fast snapshot takes less than one minute, full snapshot may take up to 15 minutes for CAN-BUS ECUs or even longer for other communication protocols). Please send the generated file(s) to support@secons.com. For cars manufactured before 2004 we will need also VIN code of the vehicle.

7.2 Control Unit Identification

This function can display only identification data accessed by ECU, for example:

- Identification data
- ECU part number
- serial number

Incomplete identification are very common mainly for older ECUs that do not provide full part number or VIN code.

FoCOM - Ford Diagnostic program	
RCM Bosch CR16 CA 2000, Ford Ka Control Unit Identification	
Control Unit Identification	ECU Part Number
Control Unit Diagnostics	VIN Code
Control Unit Selection	Car Family
Main menu	Selected ECU
	Protocol
	Bus Type
	YS5T-???-BA
	WF0BXXWPRBYR45412
	Ford Ka 2000
	RcmIsoBoschbosch_ka_200
	ISO9141
	K7
<< Go Back Save ECU Information Copy Values Print Values	

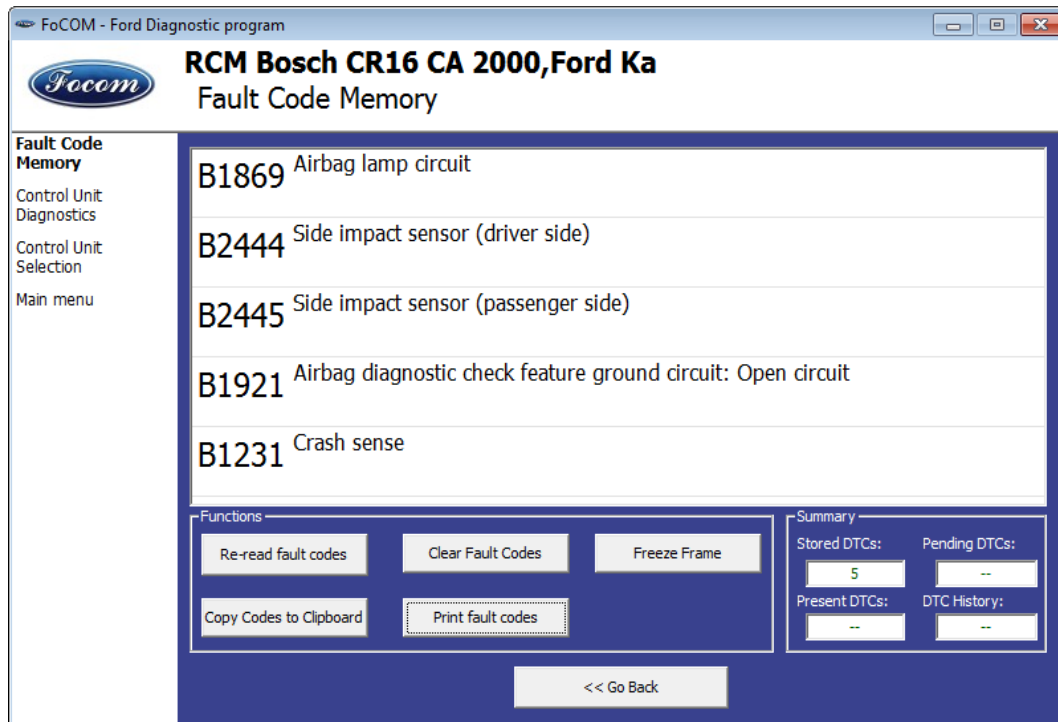
Each ECU should contain valid VIN code. If VIN is not supported, identification should display it. If it isn't provided, you can program it in function *ECU Programming/Coding*, accessible from menu *Control Unit Diagnostics*.

You can print identification by clicking on *Print Identification* button or you can copy to clipboard by clicking on *Copy Identification* button.

Save ECU Information button is used to save “ECU snapshot” of tested control unit, as mentioned in chapter [“Unrecognized Control Unit”](#) or [“Reporting bugs and improvement requests”](#).

7.3 Read fault code memory

This function allows to read and display diagnostic trouble codes saved in memory of control unit (so called CMDTC).



Please note that some ECUs (mainly those used in Jaguar) do not support fault code reading at all. Also ECUs that run in bootloader mode (e.g. the ECU is not properly programmed) do not allow fault code reading. In such case, special message is displayed.

7.4 Freeze frame

Freeze frame displays conditions at first or last occurrence of currently selected fault code.

7.5 Clear Fault Codes

This function clears fault code stored in ECU memory.

Fault codes may appear immediately again if the related problem is not solved, or depending on ECU conditions it might not be possible to clear fault codes (e.g. crash data in airbag will not allow ECU to clear fault codes).

It is recommended to read memory by clicking on *Re-read fault codes* button again after clearing the fault codes.

7.6 Measured values (live data)

FoCOM is capable of displaying and logging live data in different views.

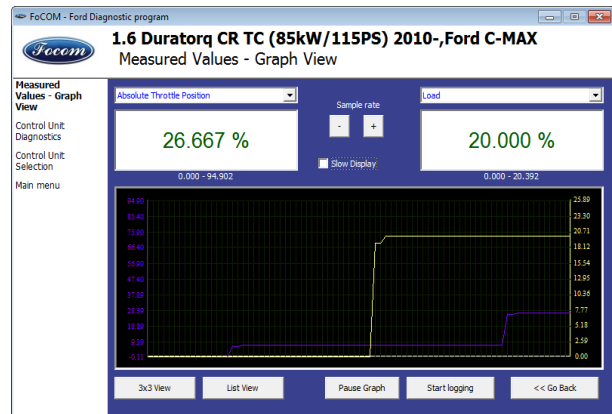
FoCOM also provides automatic physical unit conversion (e.g. kilometers to miles), desired system (metric or imperial) can be chosen in settings menu.



7.6.1 Graph display

This function displays two measured values (also known as live data or sensor values) simultaneously. Measured parameters can be chosen from selectors at the top of the window.

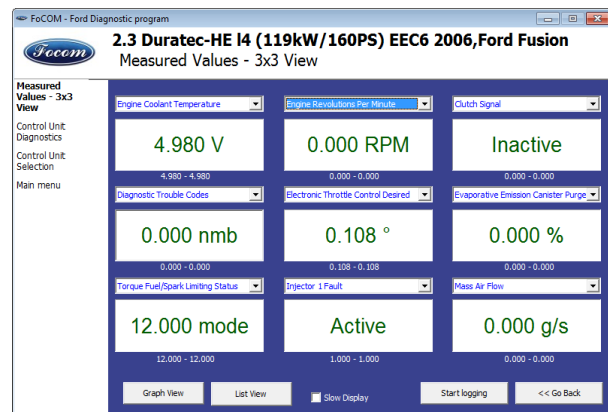
Buttons + and – allow to accelerate or decelerate speed of graph.



Graph speed is determined by communication protocol and how quickly is control unit returning requested data, FoCOM cannot affect communication speed.

7.6.2 Display 3x3

For measuring 9 value simultaneously, click on *3x3 View* button.

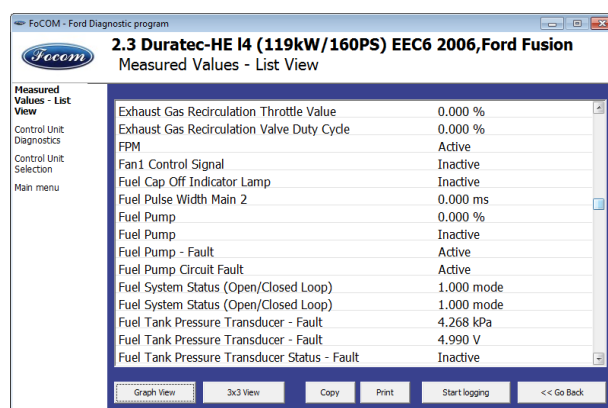


7.6.3 Display list

To measure all available values simultaneously, click on *List view* button.

Please note values means slower refresh rate.

Please note that refresh rate of live data in “list view” depends on communication speed. SCP and ISO ECUs may return data very slowly.



7.6.4 Save to log

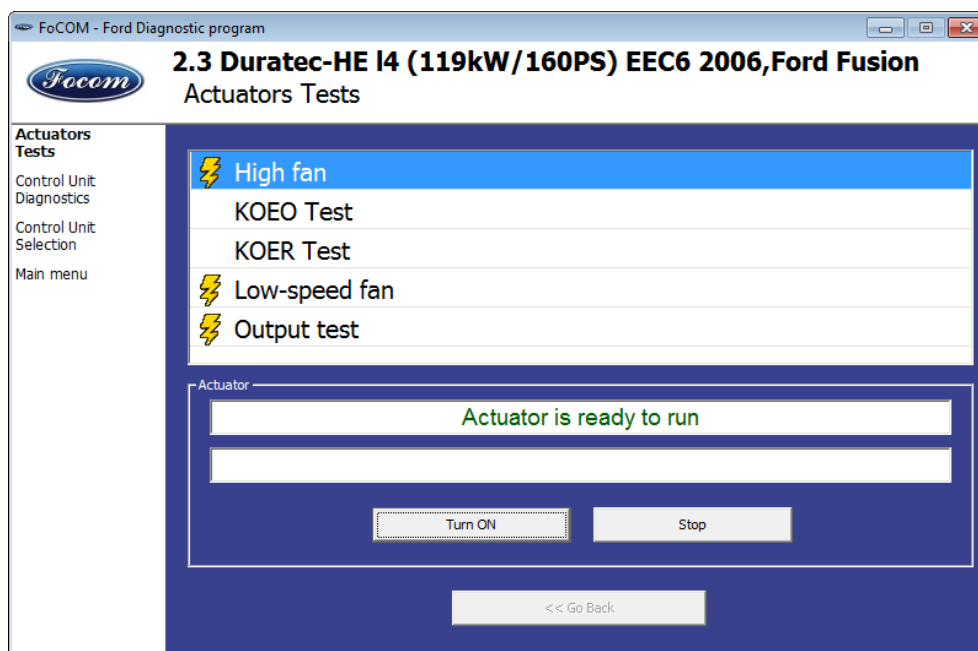
Measured values can be saved/logged to a file by clicking on *Start logging* button. The logfile is standard csv file and it is compatible with VagScope or can be imported to Microsoft Excel or OpenOffice Calc.

7.7 Actuators activation

This function is used activate actuators and perform tests (including KOEO and KOER) and various actuator actions.

Some actuator tests may display detected fault codes at the end of the test.

Please note that most control units do not allow any specific actuators, only KOEO or KOER tests (this limitation is present also in original dealer tester).



7.7.1 Key On Engine Off test (KOEO test)

KOEO is automated powertrain module test available on most EEC-V and EEC-VI control units. The test must be performed on stopped engine with ignition key in ON position. The KOEO test may require special actions such as turning steering wheel from minimum to maximum, pressing brake and accelerator pedal. For vehicle-specific instructions please refer to Ford service manuals. All problems that were detected during the test are displayed in form of fault codes at the end of test. The test terminates automatically.

The KOEO test should be performed before running KOER test.

The KOEO test may affect self-learnt values present in keep-alive memory (KAM).

7.7.2 Key On Engine Running test (KOER test)

KOER is automated powertrain module test available on most EEC-V and EEC-VI control units. The test must be performed running engine. The KOER test may require special actions such as

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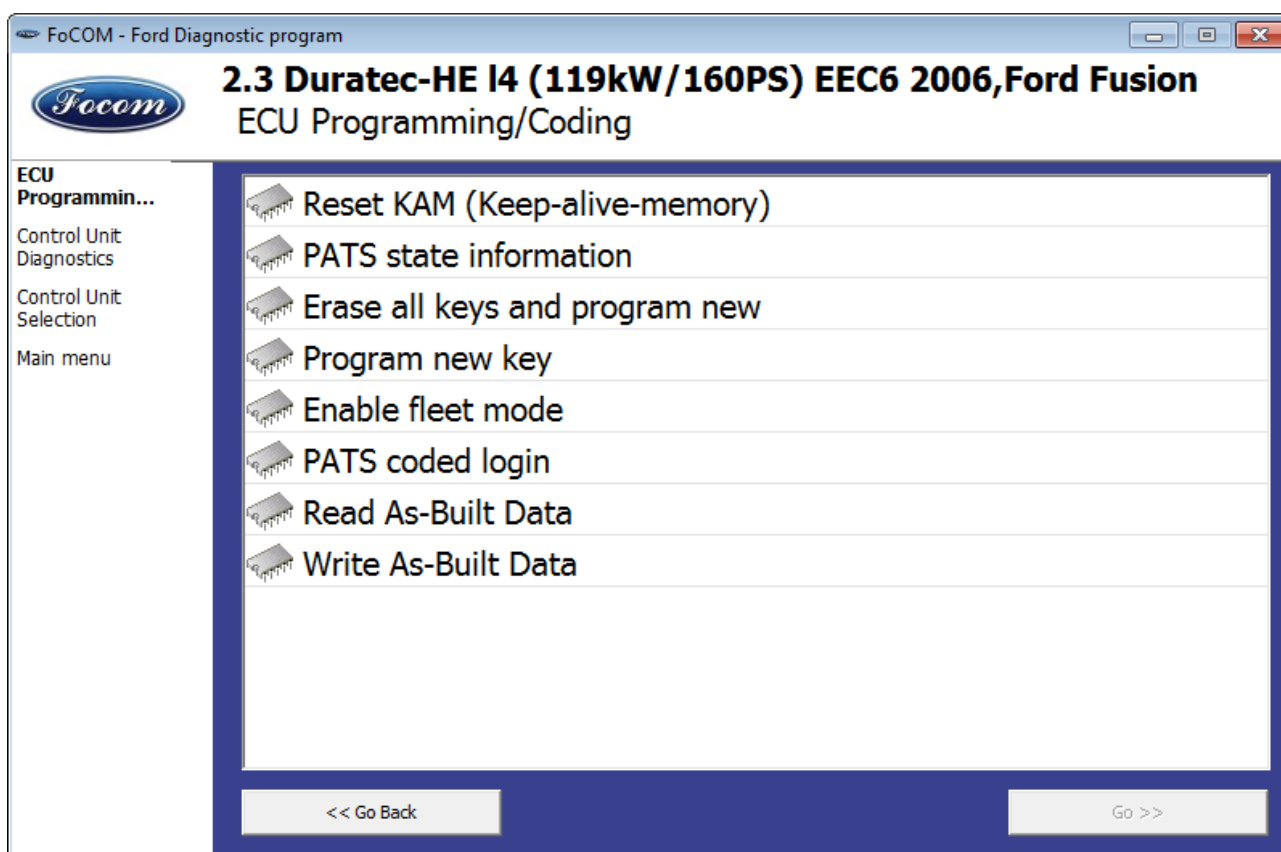
turning steering wheel from minimum to maximum or pressing brake. For vehicle-specific instructions please refer to Ford service manuals. All problems that were detected during the test are displayed in form of fault codes at the end of test. The test terminates automatically.

The KOER test may affect self-learnt values present in keep-alive memory (KAM).

7.8 Programming/Coding functions

This function allow you to e.g. programming VIN code, operate with immobilizer (PATS) or programming calibration data of injectors.

Important notice: Some of the coding functions can not be run when the engine is running and vice versa (some coding functions can not be run unless the engine is running). Some coding operations require specific conditions or procedure to be performed. Please refer to vehicle manufacturer technical service manuals for more information.



Please read carefully all manuals for specific coding operation. The manuals are available online from our website, obdrus.ru

7.8.1 PATS (immobilizer) coding and ECU pairing

These functions are used to add/code new keys to a vehicle. More detailed description is available in our PATS coding manual.

7.8.2 Diesel injector coding / pump adjustment

FoCOM supports diesel injector classification coding and fuel pump adjustments on diesel PCM control units where applicable. More detailed description is available in our Ford TDCi Injectors coding manual.

7.8.3 Diesel DPF regeneration

FoCOM supports static/dynamic diesel particulate filter regeneration and reset options on diesel PCM control units where applicable. More detailed description is available in our Ford DPF service manual.

7.8.4 Odometer adjustment

This function is available in IPC control unit and is used to adjust mileage when replacing odometer. FoCOM is capable of changing value up where instrument cluster supports this function.

In addition to the above function special paid module exists that allows changing odometer to any desired value, on both new and used instrument cluster. More information about this **paid** function is available at obdrus.ru

7.8.5 Reset ECU

This function is used to restart control unit (similar to battery/fuse disconnect). The function is useful when recorded fault codes depend on functionality of another control unit(s) or after changing central vehicle configuration.

8 Control unit configuration

This function is under development. Until the function is available to the general public please use “AS-BUILT” function in coding menu or central CCF configuration read/write function. For more information please refer to FoCOM control unit configuration manual.

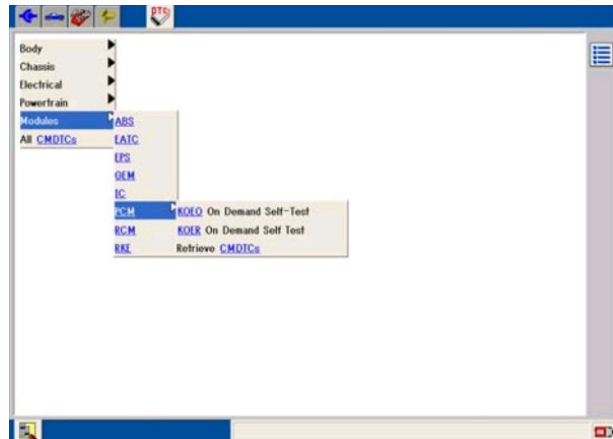
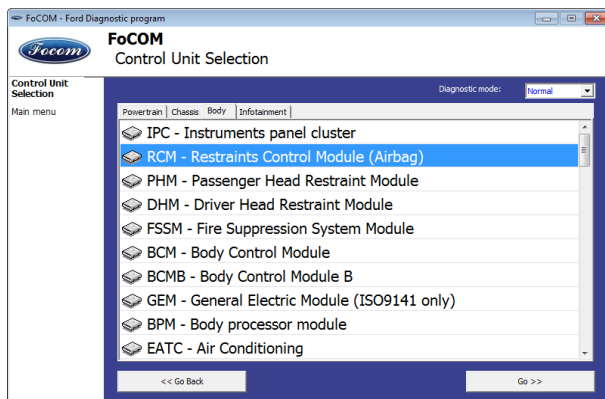
9 Control unit memory programming

Flash and serial memory programming functionality will be available shortly in special FoCOM programming module (flash programming is available to selected beta testers only, paid feature).

10 Ford IDS and FoCOM comparison

This chapter describes comparison of functions of FoCOM with original Ford Motor Diagnostics IDS (Integrated Diagnostic System).

10.1 Control unit selection



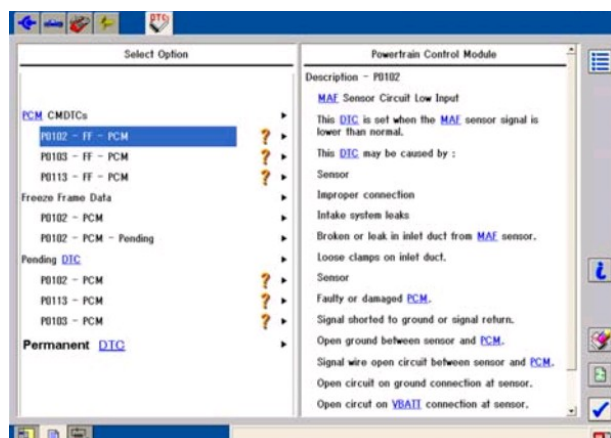
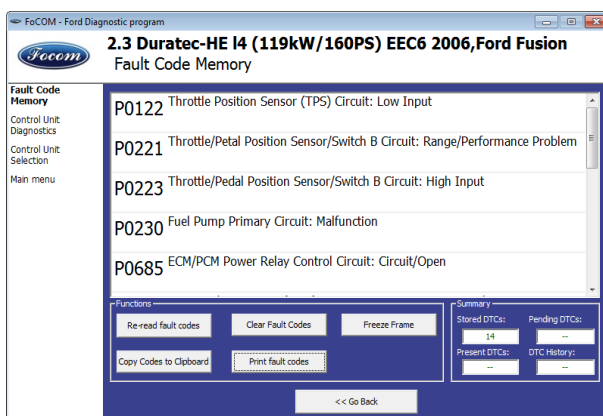
Main difference between concepts of program FoCOM and system IDS is in user approach to vehicle and its systems.

The IDS uses so called Function system, which first chooses function (e.g. Read trouble codes) and then control unit (e.g. PCM).

FoCOM chooses control unit first and then function.

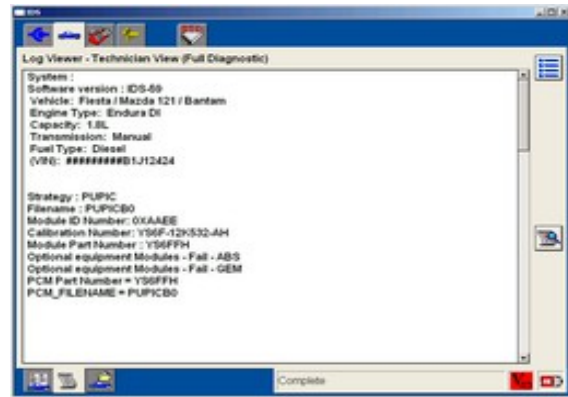
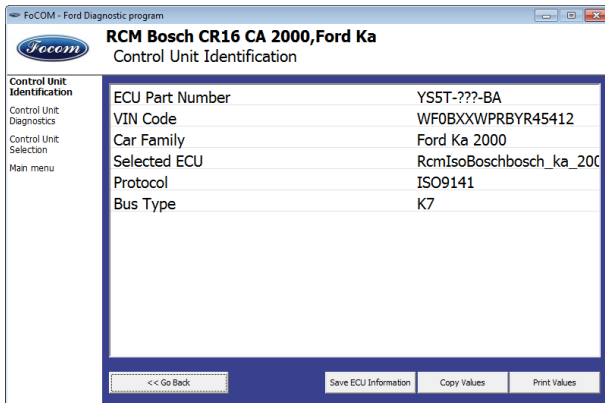
Advantage of second approach is especially similarity with other diagnostic systems (e.g. VCDS, etc.) and consequently more user friendly for those who have not much experience with IDS. Next advantage is easier identification of concrete type of control unit for programming etc.

10.2 Fault codes



Reading and Clearing Diagnostic Trouble Codes acted like IDS system, all CMDTC (*Continuous Memory Diagnostic Trouble Codes*) are read and clear from control unit.

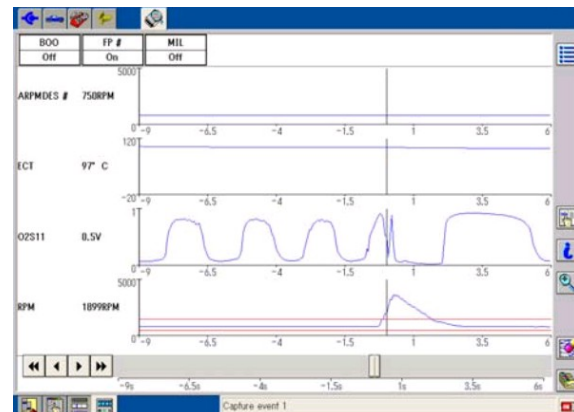
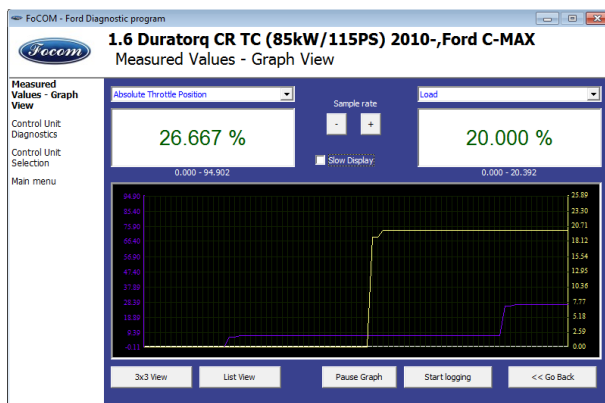
10.3 Identification



Ford IDS does not provide this function, however is possible to display some identification information in Log Viewer – Technician View (Full Diagnostic).

FoCOM use special function for reading identification information.

10.4 Measured values (Datalogger)



Unlike IDS system the FoCOM implements three options of displaying measured values:

- Graph – for comparison two measured values simultaneously in graph
- Display 3x3 – appropriate for see display from longer distance
- Display list – for display all available measured values

It isn't necessary to set vehicle equipment, which is sometimes hardly observable, FoCOM displays all measured values, provided by control unit.

The FoCOM can sometimes display more values than IDS system, e.g. in Engine control unit is commonly available distance moved from last clearing flash memory (this function isn't supported in IDS system).

10.5 Actuator activation

Actuator activation is implemented in same way like IDS system.

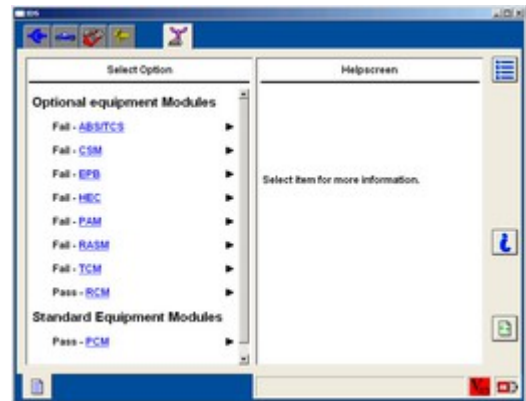
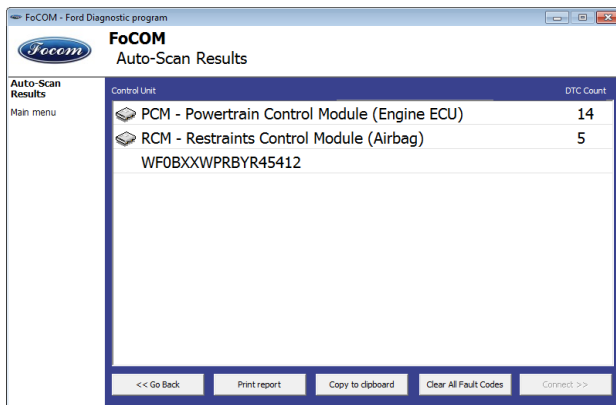
10.6 Programming function

Direct Flash / EEPROM programming functions are described in separate document and require additional license.

10.7 Autoscan (Network test)

This function scans for all known ECUs, and shows the list of ECUs present in vehicle along with number of diagnostic trouble codes, thus provide test of network.

Both functions Network Test (IDS) and Autoscan (FoCOM) are identical.



11 Reporting bugs and improvement requests

Our customers can take advantage of our full technical support for free. In case you have any difficulties with using FoCOM, do not hesitate to contact us directly at support@secons.com or through your distributor.

Please read carefully this chapter in order to provide us with all information so as we can resolve your problem quickly.

Note:

Before sending support request for failing operation, please make sure you have met all conditions required for the operation (e.g. you are entering correct data, correct engine temperature for DPF regeneration, correct number of keys for engine start, etc).

Also please make sure you have the latest FoCOM version before reporting any issues.

In case of communication issues we recommend to check diagnostic plug connection and retry procedure at least once, connection problems may result in erratic communication issues.

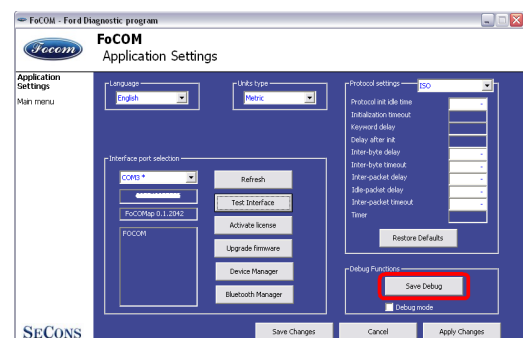
In case you encounter to failure of any program functions (e.g. fault codes reading/clearing, coding functions, actuator tests, connecting to ECU ...), or you're missing some function or some function does not work sufficiently, please prepare the following data in your email before sending your request to our technical support:

1. Detailed description of failure or your improvement request
2. Vehicle description - VIN code, model, manufacture year, engine type
3. Attach **Debug Log** (in case that required function doesn't work properly). This file captures data from the latest communication between program and ECU, so we can detect failure causes.
4. Attach **Snapshot** of tested ECU – this file contains important information about tested control unit.



11.1 How to create Debug log file

It is necessary to perform operation that is not working correctly first. Once failure occurs, go back directly to settings in main menu (do not close the program). Click on “Save Debug” button. Name and save the file into well known directory in your computer.



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Enable “Debug mode” check box only at our special request.

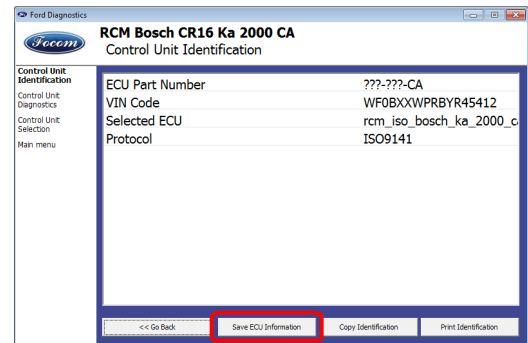
This function is used to tell program enable special functions in diagnostics interface and to log more data than required for normal operation.



11.2 How to create ecu Snapshot

After connection to related control unit, click on “Control Unit Identification”. In the following window click on “Save ECU Information” button. Click on “No” when asked whether you wish to save a full snapshot. Choose a directory to save the file and confirm. Saving may take a few minutes.

Full snapshots are required only at our special request.



Please send all support requests along with required data attached to support@secons.com. Your case will be assigned with unique ticket number in order to communicate efficiently with you.

Also feel free to contact us with any suggestions for improvements in the software on the same e-mail address. Your feedback is greatly appreciated.

12 Known problems

- US Ford models 2011: PATS coding operations are not supported on some models
- Connection to Japan-made ABS on Mazda 3 2006 may fail (this issue is related to one specific ABS ECU)
- EEC-IV (pre-1996 ECUs) DLC diagnostics may not return correct data on some ECUs.

Above problems will be resolved in future FoCOM updates.



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