FORD TRUCKS

FODIT User Manual



			Date of	
Vehicle	Title	Document No:	Issue	Language
F-MAX	FODIT User Manual		26.10.2021	EN



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AA	23/09/2021	C.YILMAZ	

Prepared by the Department of: Ford Trucks Service Engineering

Communication: Cem YILMAZ E-Mail cyilma18@ford.com.tr Mobile: (0 553) 644 56 41

PREFACE

This manual contains required information and methods of applications for vehicle identification, error code read, test identification and implementation, analysis of road test metering, installing software to the vehicle modules for F-MAX (H625) Ford Heavy Vehicles.

Defined connections and applications must be performed by competent and trained personnel.

The license authentications that allow logging in to the program must be followed up by the related personnel in the service and licenses that are due must be renewed before expiring.

During application, the necessary precautions must be taken by the technician for worker health and safety. Service management should allow taking necessary precautions and should check them. No operation should be started without necessary safety measures being taken. No union, interface and computers without usage information should be used. The module programming operations that are deemed necessary during the checks performed must be conducted by experienced and trained personnel. Data other than the vehicle fabrication information should not be entered.

Ford Otomotiv San. Tic. A.Ş. reserves the right to make changes on this operation manual.

The data and information present in this document may not be updated due to the changes made by Ford Otosan Otomotiv San. Tic. A.Ş. at any time because of technical or commercial reasons or for the need to conform the vehicle to legal obligation in various.

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System Requirements:

Operating System	Windows 10
RAM	8GB
СРИ	Intel Core i5 8th gen
Architecture (32/64)	32 / 64
Disc Space	2GB Software + Diagnostic Data
Video card	Integrated Graphics

FODiT Installation Processes

For the installation of the program, it should be performed according to the System Type: 32bit/64bit status of the Windows operating system used via the link below. Please click right on mouse.

Click the right mouse button on the "This PC" icon on the desktop and select "Properties". As seen in the screenshot below, the installation should be performed according to the system type.

ndows edition	
Windows 8.1 Pro	
© 2013 Microsoft Corpora	tion. All rights reserved.
stem	
stem Processor:	Intel(R) Core(TM) i5-5300U CPU @ 2.30GHz 2.29 GHz
stem Processor: Installed memory (RAM):	Intel(R) Core(TM) i5-5300U CPU @ 2.30GHz 2.29 GHz 16,0 GB (15,9 GB usable)
Processor:	

	Ana Sayfa	> Service Documents Ford Trucks > Engineering > Diagnostics	> FODiT		
	FODIT				👫 Grid Görünümü
			Arama	٩	
	PDF	VCI User Manual Rev_01.pdf VCI User Manual Rev_01			Vilkleyen: cytena18 Vilkleme Tarhi: 00.09.2021 13:25:04
	∢	FO Connect UAT Installation.mp4 Installation			Vikleyen: cyffina 18 Viklemei Tarhl: 30.07.2021 16.44.52
L	PDF	Installing+the+Ford+Otosan+Connect+Client.pdf Installation			Vülkisyn: cytma18 Vülkisme Tarhl: 30.07.2021 16:41:18
		Windows_F0_Connect_rte_64_Bit_stable-21.05.64 (2).zip Installation			Vilkisyn: cyfma 18 Vilkism: Tarhi: 30.67.021 16:40:32
l		Windows_F0_Connect_rte_32_Bit_stable-21.05.64 (1).zip			Viikleyen: cytima18 Viikleme Tarhi: 30.07.2021 16:24:02

• Double click 1.0.0_Full.rar file to extract .rar files. Check your computer specifications (X32 or X64) and run the appropriate Setup.exe file.

		٧	Vindows_FO_Co	nnect_rte_32_Bit_	stable-21.05.
File Commands Tools Favorites Options Help					
🧊 🔯 💽 🔄 📸		۱		*	
Add Extract To Test View Delete Find	Wizard	Info Viru	sScan Comment	SFX	
					60.633
	Wizard	Info Virus Packed		SFX	CRC32
					CRC32

• Installation starts.



• Select the language you prefer and click "OK' and go on installation.



- Click 'Finish' in order to complete the installation and to proceed to the updating process.
- Control the updates.

	All modules are up to date.			FOR
8.0				100.00 %
Module		Version	Status	
Ford Otosan	Connect	2	8 The latest version is installed.	
Ford Otosan	Diagnostic Tool	21.02.21	4 The latest version is installed.	

• Download the updated files.

督		Ford Otosan Connect				
Check for updates						
		0.00 %				
Module	Version	Status				
Ford Otosan Connect	<u> </u>	Check for updates				
Ford Otosan Diagnostic Tool	21.02.214	Check for updates				

• Choose the option 'Install Now' after downloading and finish the updating process.

Ford Otosan Connect	-		×
All modules are up to date.		OI	ORD
100.00 %			
Module 2 Version Status			
Ford Otosan Connect			
Ford Otosan Service Bay Client 2 4 The latest version is installed.		0	
About Ford Otosan Connect Check for	updates		Close

- 1. Complete Summary, if all Modules are up to date
- 2. Name of the Modules
- 3. Defines the current Version, and if it is up to date
- Module Status
 - 1. Error, when no internet connection is available, or if something different is gone wrong
 - 2. Warning, when there are pending updates available, or if an update is performed right now

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- 3. Ok, when there is nothing to do, because all updates are installed properly
- 5. Update percentage (shows the progress of installing and downloading packages
- 6. Trigger a manual update check
- 7. Close the UI (nevertheless it will stay running in the tray bar)
- Module Connection

The connection between the FODiT program and the vehicle is established via using the VCI Kit (KTJC46-INTER-FACE). Connection can be established with this kit between F-MAX vehicles and FODiT.



• F-MAX Diagnostics Port Location on Vehicle:



• Click on the 'FODIT' icon on the desktop.



• You can start the program with your username and password.

		FORD ΟΤΟΣΛΝ	
	1	User Name	
	•	Password	
		Forgot My Password!	
		Log In	
V	Narnir	gl	
y a d y	vou are applications doing an vou don'	bout to access to a Ford Otosan application. This application can only be used by authorized users. If NOT an authorized user or the user id you are using does NOT belong to you, your access to the n is unathorized and could be criminal. In this situation, please close the application screen without y logon attempts. Every logon attempts are logged and reviewed against misuse of the application. If have any valid user id and if you need an access to Ford Otosan systems, please request an access ng procedures.	
co Koç			Ford

• You can set the preferred language by pressing the language selection icon in the upper right corner of the window.



• You can perform the vehicle selection as demonstrated below.



• Click on the 'Scan Vehicle' button in order to find the Modules on the Window.

:	🔅 Diagnosis			<u>.</u>	⊞	۹	\$	Ð
	ECUs						<mark>Scan Vehic</mark> Show all DT	Cs
		System	Status	DTCs				
		ACM	Unknown					
		АМТ	Unknown					
		ВСМ	Unknown					
		ртсо	Unknown					
		EAPU	Unknown					

• Connection status, background theme and language options can be changed in the Settings Menu. (Details are included in the VCI user book for making Wi-Fi and Bluetooth connections)

Diagnosis	Settings X		<u>0</u>		Q	۵	Ð
	Settings						
	General General settings affecting the user interface.	Language English Dark theme Dev mode					
	VCI The VCI is mandatory when you want to diagnose the vehicle. Once selected, the VCI remains set, even when you restart the application.	DSIM_F-max.dsim CONNECTED OynSim	I	Disconne Search VCI			

• Version Information Menu;

You can check the version of the program from this Menu by clicking on the "Ford Otosan Connect" icon.



Ford Oto	san Connect		_	1		×
	All modules ar	e up to date.			FO	
80			100.00 %			
Module		Version	Status			
Ford Otosan	Connect	26	The latest version is installed.			
Ford Otosan	Service Bay Client	21.02.214	The latest version is installed.			
About Ford O	tosan Connect		Check for updat	es	Clo	ose

The update/installation window shown above is opened automatically when there is an updated version of the FODIT program, and the update process starts.

Supported Modules and Controlled Features:

The modules that you can connect with FODIT and the operations that can be controlled in these modules are as below:

Acronym	Description
ECM	Engine Control Unit
HVAC	A/C Control Unit
EAPU	Electronic Air Drying Unit
BCM	Body Control Unit
IC	Instrument Panel (Cluster)
SSL	Multi-functional Handle (LH)
SSR	Gear Selecting Lever (RH)
TCU	Era-Glonass Module
FLR	Radar (AEBS-Emergency Brake System)
FLC	Camera (LDWS-Lane Departure Warning System)

EBS	Electronic Braking System
AMT	Automatic Transmission Control Unit
Retarder	Retarder
DTCO	Digital Tachograph
ACM	Multimedia Unit (2 DIN)
PCCM	Predictive Cruise Control Module
TPMS	Tire Pressure Monitoring Unit

Features Controlled in Modules:

	Reading ECUID		Manual Regen	
	3		-	
	VIN Reading/Writing		Service Regeneration for	
	DTC Code Reading/Deleting		Deposit Cleaning	
	Engine Code Reading/Writing		Air Heater Test	
	Module Programming		Injector Shut-Off Test	
Injector Code IQA Reading/Writing			DPM Priming Test	
Special Tests			Engine Compression Test	
	Configuration Reading/Writing		Engine Brake Test	
	SBD (Symptom Based Diagnostics)		Engine Start and Stop	
	PTO Speed Reading/Writing		Urea Dosing Test	
EMS	CALID Parameter Reading/Writing		ATS Test Routine	
Engine Control	Road Data (Flight Recorder)		Compression Test	
Unit	 Regen Statistics 		Two Speed Water Pump Test	
	 Urea Quality History 		Misfire Detection	
	Oil Reset		Fan Test	
	Low Iddle Shutdown		Soot Load Reset	
	ECM Template		PRV Reset Routine	
	 AFTT (Exhaust Emission Remova 	I)	Fuel Rail Pressure Exceed	
	Engine Template		Reset	
	Driver Interaction Template			
	Air Path Template			
	Exteended Configuration Parameters			
	Clutch Reset			

HVAC	Reading ECUID VIN Reading/Writing DTC Reading/Deleting Module Programming Special Tests		
A/C Control Unit	 Prepare A/C Evaluation On-Demand Self- Test 		
	Assembly TestActuator Calibration		
	Configuration Reading/Writing		

EAPU	Reading ECUID
Electronic Air Drying Unit	VIN Reading/Writing
	DTC Reading/Deleting

	Reading ECUID VIN Reading/Writing DTC Reading/Deleting
	Module Programming
F-MAX BCU	Configuration Reading/Writing
Vehicle Control Unit	ECAS Height Sensor Calibration
	ECAS Pressure Sensor Calibration
	Key Programming
	RLSM Calibration
	Reset Drive Mode

F-MAX IC Instrument Panel	Reading ECUID VIN Reading/Writing DTC Reading/Deleting Module Programming Read Odometer Read Keys Configuration Reading/Writing PATS a. Cluster or Cluster & ECM Change b. Erase Programmed Keys c. Only ECM Change Vehicle Guardian Buzzer Test	
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EBS Electronic Braking System	Reading ECUID VIN Reading/Writing DTC Reading/Deleting Module Programming SAS & YRS Calibration Configuration Reading/Writing
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•

	Reading ECUID
DTCO Stoneridge	VIN Reading/Writing
Digital Tachograph	DTC Reading/Deleting
	Configuration Reading/Writing

FLR Radar Active Emergency Brake System	Reading ECUID VIN Reading/Writing DTC Reading/Deleting

FLC Camera Lane Departure Warning System	Reading ECUID VIN No Reading/Writing DTC Reading/Deleting Configuration Reading
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PCCM Cruise Control Module	Reading ECUID VIN Reading/Writing DTC Reading/Deleting Module Programming Configuration Reading/Writing Device Registration Device Replacement	
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АМТ	Reading ECUID VIN Reading/Writing DTC Reading/Deleting Slope Sensor Calibration	
	Clutch Installation Clutch Touch Point	
	Module Programming	
	Configuration Reading/Writing	

ACM	Reading ECUID
Multimedia Unit (2 DIN)	DTC Reading/Deleting
Multimedia Unit (2 DIN)	Speaker Walkaround test

Retarder

TPMS Tire Pressure Monitoring Unit	Reading ECUID VIN Reading/Writing DTC Reading/Deleting Configuration Reading/Writing Write Sensor ID Location
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FODiT Module Information

After running the program, "Scan the Vehicle" button is clicked on the opening window and the "**Module Selection Menu**" appears where the modules in the vehicle are being introduced .

脅			Ford Otosan				- • ×
Diagnosis	🔅 Settings	×		Ð	۹	\$	Ð
ECUs						Scan Vehio Show all D1	
	System		Status	DTCs			lecodes
-	АСМ		Unknown				
-	АМТ		Unknown				
-	ВСМ		Unknown				
-	DTCO		Unknown				
-	EAPU		Unknown				

EMS – Engine Control Unit (ECU):

Reading ECUID:

You can make it read by pressing the ECU ID button. You can also see the software information recorded in ECU.

				. 🗇 🗙
0	⊞	Q	٠	Ð
				D
	2	2 ∎	< Back	

VIN Reading/Writing:

You can perform the operations of reading the vehicle chassis number recorded in the ECU module and writing chassis number into the ECU module from the functions tab.

When the vehicle's ECM module is replaced or an ECM is installed from another vehicle, the Chassis number must be written to the new ECM module.

츕					Ford Ot	osan				-	0 ×
	🔅 Diagnosis	🔹 Settings	×				2	⊞	Q	۵	Ð
									🗸 Back		
	ECM									Run	
	DTCs	ECU ID		Measurements	Functions						
	Start Stop										
	Switchable Ai	ir Compressor									
	Two Speed W	Vater Pump Test									
	Urea Dosing	Test									

荟		Ford Otosan				-	D ×
🏟 Diagnosis 🔅 Settings	×		0	□	Q	۵	€
						Read VIN	
Function - VIN						Write VIN	
Please insert or read VIN.						Cancel	
Vehicle Identification Number							
NM0KCXTP6KLK94318							
✓ VIN was read successfully.							

DTC Reading/Deleting:

<u>Clear & Read DTC Codes</u>: It is the screen where the error codes received from the vehicle are read/deleted. Reading is performed from the DTCs tab. It is important to convey the error codes received to the Technical Support Form in vehicle malfunctions where support shall be requested.

츕				Ford Otosa	in					-	- 🗇 🗙
٥	Diagnosis	🔹 Settings 🛛 🗙				ε	<u>ا</u> ا	≣	Q	۵	Ð
									< Back		
E	ECM										
									Clear	all Trouble	ecodes
	DTCs	ECU ID	Measurements	Functions					Rea	d troublec	odes
	DTC ↑	Hexcode	Description								
	U0073-31	0xc07331	error passive CAN A			Freeze Frame Da	ta				
			Malfunction Lamp : Off								
			Fault Type : Hidden Fault								
			Fault Status : Active								

Error status	Gives the information whether the error continues or it has been fixed.
Error has been fixed	Error has been already detected, but it has been inspected during the last drive and no error has been found.
Not tested	The status of this fault has not been inspected yet.
The error occurred during this drive but at the moment the fault does not exist.	The fault has been detected during the last drive but it is not active at the moment.
Error active	The error has been detected during the last drive and is still active.

Error Type	Errors that flash MIL are classified as approved errors after being detected in 3 drives. The first time they are detected they are classified as "pending". Errors that do not flash MIL are classified as approved upon first detection.
Approved	Error has been detected during 3 drives for emission affecting errors.
Pending	No error has been detected yet during 3 drives.

Fault Indicator Light	Is the fault indicator light on because of this fault?
Not on	No. (Even the fault indicator light is on, the reason is not this fault code)
On	Yes (The fault indicator light is on because of this fault)

<u>OHM</u>: Gives information about the received DTC, possible causes and gives recommendation steps to solve the problem.

Header Information		
Project: H625	Module: BCM	DTC: 9FB092
DTC Information		
ECAS_Height Sensor Calibration is	not completed	
Possible Causes		Troubleshooting
 Check the ECAS calibration bloc Check the air pressure on the veh 	k type according to suspension type. icle via cluster screen.	 Check if B1FE1-92 or B1FE2-92 DTCs are active. If they are active, solve these DTCs first. 4. Make sure the engine is running during calibration process.
Vehicle Reaction		5. Make sure ECAS parameters are set correctly according to suspension
Yellow ECAS warning is seen on th adjusted to ride height level. Axle lo cluster.	2	type. 6. Check if there is any active DTC starting with ECAS_QF. If they are active, solve these DTCs first.
Recurrence Prevention		 7. Check the sensor arms assembled correctly. *

Write Engine Code:

You can perform the operations of reading the vehicle engine code recorded in the ECU module and writing engine code into the ECU module from the functions tab.

- When the vehicle ECU module is changed or programmed, it is required to write the engine code to the ECU module.

Diagnosis	🔹 Settings	×			2	⊞	Q	۵	€
							🕻 Back		
ECM								Run	
DTCs	ECU ID	Measurements	Functions						
Start Stop									
Switchable Ai	r Compressor								
Two Speed W	later Pump Test								
Urea Dosing	Test								
VIN									
Write Cal. ID									
Write Engine	Code								



Module Programming:

ECU programming (Flashing) is performed through this option.





Situations for ECU Programming (Flashing)

- If there are any campaigns specified for the subject vehicle flashing must be performed.
- If a new ECU is fitted to the vehicle, ECU flashing must be performed.

Issues to Consider During ECU Programming (Flashing)

• No operations must be performed on the vehicle during flashing. Example: No removal/installation, pressing on buttons, removing/plugging sockets must be performed on the vehicle.

When a new ECU is installed, the **Chassis Number must be written** into the module before the programming (Flashing) process, and then the operations listed below **must** be performed.

12

Module Programming (Flashing) Writing Engine Code Writing Injector Code Writing Configuration Writing Additional Configuration Parameter CALID

Note:

After these operations, an Immobilizer warning will be **done from the IC module** (Instrument Panel).



displayed. PATS (Key) Activation must be

Injector Code Reading/Writing:

You can perform the operations of reading the injector code recorded in the ECU module and writing injector code into the ECU module from this tab.

- When the vehicle ECU module, injectors are changed or programmed, it is required to write the injector code to the ECU module.

٢	Diagnosis					:	⊞	Q	۵	Ð
	ECM							🗲 Back		
	DTCs	ECU ID	Measurements	Functions						
	DPM Priming Test									
	Engine Brake Test									
	Extended Configuration	Parameter								
	Fan Test									
	Injection Shut-Off									
	Injector Code IQA 🦂									
	Low Idle Shutdown									
2	FORD OTOSAN • F-MA	X•H625						12.00	/ 🗆 🔨	∕ • 📾

Diagnosis	8	■	Q	۵	€
Cylinder 1				Write	
СААІСУАВАА				Exit	
Cylinder 2					
8AH3D7AA1A					
Cylinder 3					
CIHYD3ABSA					
Cylinder 4					
ASHCA7AASA					
Cylinder 5					
GABABYAAAA					
Cylinder 6					
CIASC3AAAA					

Special Tests:



- Manual Regen
- Service Regeneration for Deposit Cleaning
- Air Heater Test
- Injector Shut-Off Test
- > DPM Priming Test
- Engine Compression Test
- > Engine Brake Test
- Engine Start and Stop
- Urea Dosing Test
- > ATS Test Routine
- Compression Test
- Two Speed Water Pump Test
- Misfire Detection
- Fan Test
- Soot Load Reset
- PRV Reset Routine
- Fuel Rail Pressure Exceed Reset

Manual Regen:

The same regen procedure performed via test screen, not manually inside the cab



Air Heater Test:

The performance test of the air heater in the 12.7L Ecotorq engine

Diagnosis	🔅 Settings	×	🔶 ЕСМ	×		0	۹	٥	€
ECM (Er	ngine Contro		dule)				🗸 Back		
								Run	
DTCs	ECU ID		Measurements	Functions					
Air Heater Te	est								

Injector Shut-off Test:

In this test, injectors are shut down by one by in order to observe the operation of injectors based on the chanhe of engine operation pattern.



DPM Priming Test: (Departronic Module Dosage Procedure)

This dosage procedure must be performed absolutely by the service when the line between the departronic module, injector module on the exhaust outlet and two modules is modified.

٢	Diagnosis					2	⊞	۹	۵	€
								K Back		
	ECM									
									Run	
	DTCs	ECU ID	Measurements	Functions						
	Air Heater Test									
	ATS Test Routine									
	Clutch Reset									
	Compression Test									
	Configuration Parameters	5								
	Delete Long Term Error									
	DPM Priming Test									

Engine Compression Test:

The performance of engine cylinder inner pressure can be observed with this test.

@ D	iagnosis				ł	0	⊞	Q	۵	€
								🕻 Back		
E	СМ								Run	
	DTCs	ECU ID	Measurements	Functions					Kun	
-	ATS Test Routine		_							
	Clutch Reset									
(Compression Test									
(Configuration Param	eters								
((Clutch Reset Compression Test	eters								

Engine Brake Test:

Measures the function of the engine brake. The test starts upon selection of the engine displacement.

٥	Diagnosis					•	⊞	Q	۵	€
								🕻 Back		
	ECM								Run	
	DTCs	ECU ID	Measurements	Functions						
	Delete Long Tern	n Error								
	DPM Priming Tes	st								
	Engine Brake Te	st 🔶								
	Extended Config	uration Parameter								

Engine Start and Stop:

Without interfering the ignition, the engine is started and stopped remotely. It is used actively for reading active-passive error codes.

٥	Diagnosis								2	∷	Q	۵	€
	ECM										🕻 Back		
	DTCs		ECU ID	N	<i>l</i> easurements	Functions						Run	
	Oil Reset												
	Particular Filte	er Regenera	ition										
	Power Take C	off (PTO)											
	Start Stop												

Urea DosingTest:

Performs the test of the complete SCR system which includes Adblue tank, Adblue pump, heater valve, adblue line and injector. If there is DTC in the system it won't start the test. Directs the test via directives.

0	Diagnosis						₽	⊞	Q	۵	€
									🗸 Back		
	ECM										
										Run	
	DTCs		ECU ID	Measurements	Functions						
	Power Take O	off (PTO)									
	Start Stop										
	Switchable Air	r Compress	or								
	Two Speed W	ater Pump	Test								
	Urea Dosing T	Test									

Test Speed Water Pum Test:

The test performed in vehicles equipped with two-speed water pump to measure the performance of the two-speed water pump to measure.

é	Diagnosis					<u></u>	□	Q	۵	Ð
	ECM							🕻 Back		
	20111								Run	
	DTCs	ECU ID	Measurements	Functions						
	Start Stop									
	Switchable Air C	Compressor								
	Two Speed Wat	ter Pump Test								

Cylinder Misfiring Detection Test:

Run this test, if the cylinder is misfiring in the vehicle. Action must be taken according to the conclusion.

0	Diagnosis				8	Q	\$	Ð
						🗸 Back		
	ECM							
							Run	
	DTCs	ECU ID	Measurements	Functions				
	Injector Code IQA							
	Low Idle Shutdown							
	Misfire Detection							

Fan Test:

Run this test, if the cooling fan switch has Electrical and Cooling Performance errors.

삼			Ford Otos	san Login				-	0 ×
Diagnosis					<u> </u>	∃	Q	۵	€
ECM							🗸 Back		
ECM								Run	
DTCs	ECU ID	Measurements	Functions	_					
Fan Test 🧲									

Soot Load Reset:

When the DPF filter of this test is overfilled, the P246300 error code is displayed in the FODiT and cannot be deleted. This procedure is used to perform the reset procedure from this menu after DPF filter replacement.

Diagnosis	Q	\$	Ð
ECM (Engine Control Module)	< Back		
DTCs ECU ID Measurements Functions		Run	
Pressure Relief Valve Reset Routine			
Service Regeneration for Deposit Cleaning			
Soot Load Reset			

-PRV Reset Routine

The mechanical lifetime of the fuel rail pressure valve is recorded in the memory of the EMS module. P000F-05/04 error codes appear on the screen when it reaches a certain measurement limit. After PRV replacement, lifetime reset procedure is performed with this test.

Diagnosis	ৎ 💠 হি
ECM (Engine Control Module)	< Back
DTCs ECU ID Measurements Functions	Run
Mistire Detection	
Oil Reset	
Power Take Off (PTO)	
Pressure Relief Valve Reset Routine	

Service Regeneration for Deposit Cleaning

The purpose of this test is to dissolve the urea residues accumulated in the muffler at high temperature (650C). During the test, the engine speed will increase and the exhaust will be heated to remove any urea clogging of the muffler. Test lasts for about 1 hour.

Diagnosis	Q 🂠 Đ
ECM (Engine Control Module)	🗸 Back
DTCs ECU ID Measurements Functions	Run
Pressure Relief Valve Reset Routine	
Service Regeneration for Deposit Cleaning	

Configuration Parameters:

This screen enables viewing the configurations on the connected vehicle or suitable configuration can be written depending on vehicle properties.

Diagnosis				<u></u>	۹	\$	Ð
					🗸 Back		
ECM					_		
DTCs	ECU ID	Measurements	Functions			Run	
Air Heater Test							
ATS Test Routine							
Clutch Reset							
Compression Test							
Configuration Parameters							

Wrong configuration parameters in ECU can light up a warning lamp on the panel. Thus, it must be ensured that correct information is entered.

Parameters that are read over the configuration writing screen are to be confirmed <u>through the vehicle</u> and written accordingly. If a change is made in the configuration, it should be specified in the remarks section.

Diagnosis	3	⊞	۹	۵	€
				Apply	
Function - Configuration Parameters		1		Exit	
Aktive Emergency Breaking					
Cab Type					
H476/H566 & 13I & Daily Cab & Other Emissions -					
Coolant Factor					
Less 330 PS / Enable -					
Differential Ratio					
3.57 -					
EBS EOL Completion Check					
1					

Diagnosis	2	⊞	۹	۵	€
ESP ESP					
Fuel Tank Volume				Apply	
315 I 🗸				Exit	
Intarder					
Cow Idle Shutdown					
Overheat Warning					
Predictive Cruise Control					
Speed Limit					
80					
Switchable Air Compressor					
Disable -					
Urea Tank Size					
EU6 Short Tank -					

삼		Ford Otosan Login			-	D ×
@	Diagnosis		0	۹	\$	€
	80				Apply	
Sw	vitchable Air Compressor				Exit	
	Disable	•				
Ur	ea Tank Size					
	EU6 Short Tank	-				
Ve	hicle Type					
	Nonconstruction / 13 I & EU6	•				
Ve	hide Type with PTO					
	Tipper	•				
w	heel Circumference					
	13 R 22.5	•				
De	alta Pressure Sensor					
	Old	•				

Description of the parameters which are going to be written to the module:

Active Emergency Brake System:

If there is AEBS (Aktif Emniyet Fren Sistemi) i.e. Radar Module available in the vehicle, it should be selected as Active.

A/C:

If there is A/C available in the vehicle, it should be selected as Active.

Cab Type:

Selection should be made according to the bed type in the cab. For double cab, **CrewCab** is to be selected.

Coolant Factor:

If the vehicle is 9.0 l. 330ps; 330PS

If the vehicle is 9.0 I. 330 ps external (12.7 I. 480-420Ps) and without air compressor with clutch:, **330PS External / N/A** If the vehicle is 9.0 I. 330 ps external (12.7 I. 480-420Ps) and with air compressor with clutch:, **330PS External / Available** must be selected.

Final Drive Ratio (FDR):

Selection should be made according to the differential gear ratio. Selection is to be made over the plate on the differential or sales sheet belonging to the vehicle model.

EBS:

If there is an EBS module available in the vehicle, it should be selected as **Active**.

ESP:

If there is ESP available in the vehicle, it should be selected as **Active**. (The instrument cluster indicates slippery road warning.)

Fuel Tank Volume:

Selection should be made according to the RH (passenger side) fuel tank volume.

Intarder:

If there is an Intarder available in the vehicle, it should be selected as **Active**. Visual inspection over transmission

Low idle shutdown:

Activates the shut off feature of the vehicle at idle operation without interfering Selected upon customer's request

Overheat Warning:

It's the Overheat Warning for the Clutch. If there is double clutch lining available in the vehicle this parameter should be selected as Deactivated.

Predictive Cruise Control:

This screen is used entering the maximum speed for the Cruise Control.

Switchable Air Compressor:

If the air compressor of the vehicle is with clutch, it should be selected as **Active**.

Urea Tank Size:

Should be selected according to the dimensions of the urea tank on the vehicle and Emission Info available on the Sales sheet

Vehicle type: (Very Important)

This parameter affects the vehicle's oil maintenance algorithm. It must be written absolutely correct. Should be selected according to the vehicle's engine displacement and the way the engine is being used.

Vehicle Type with PTO:

Selection should be made according to the PTO type in the vehicle. For all vehicle types without Concrete Pump and Damper, **Other Type** needs to selected.

Wheel Circumference:

Wheel size should be entered from the list on the vehicle.

Measurements:

Data passing through the CAN data line are being observed and kept in the road tests for the remedy based on the customer complaint. The cause is fixed with the help of the analysis of the received data.

삼 년 - 1997년 - 19970년 - 1997년 - 19970		Ford Otos	san Login				-	D ×
Diagnosis				2	⊞	Q	٠	€
ECM						K Back		
DTCS ECU ID	Measurements	Functions						
(i) Hint: Up to 10 measurements can be selected.								
Ad-Blue® Pressure (in hPa)								
Ambient Parometric Pressure				~				
Ambient Temperature (in °C)								
Commanded EGR Valve Actuator Positio	n (in %)							

Diagnosis	8	≣	Q	۵	€
Measurements					
Ad-Blue® Pressure	11,000 hPa			Grid view	_
Ambient Barometric Pressure - Ambient Parometric Pressure	977 hPa		Timeline		
Ambient Temperature	24.860 °C		_	Pause	
Commanded EGR Valve Actuator Position	0.0122 %				

PTO Reading/Writing:

The written PTO speed is read on the PTO speed reading screen. Desired PTO speed is written on the writing screen.

Maximum PTO Speed: Shows the speed PTO is limited to rise to. (Approx. :1300-1400 rpm) Starting PTO Speed: Shows the speed PTO is being activated at. (Idle speed: 600 rpm)

At concrete pump superstructured vehicles, selection is made according to Gear Series (High-Low) requested by the PTO manufacturer.

۵	Diagnosis						2	⊞	۹		€
	ECM								🕻 Back		
	DTCs		ECU ID	Measurements	Functions					Run	
	Power Take O	off (PTO)									

😫 Diagnosis			<u></u>	⊞	۹	۵	€
						Continue	
Function - Power Take Off (P			Exit				
Read Power Take Off							
	PTO Engine Speed Increment						
	66 rpm						
Maximum Engine Speed							
Engine PTO	Concrete Pump	Transmission PTO					
1,688 rpm	0 rpm	0 rpm					

CALID:

Following the ECU (EMS) module programming CALID writing should be performed.

Diagnosis						<u></u>	▦	Q	۵	€
								🕻 Back		
ECM									Run	
DTCs	ECU I	ID I	Measurements	Functions						
Start Stop										
Switchable	Air Compressor									
Two Speed	Water Pump Test									
Urea Dosin	g Test									
VIN										
Write Cal. II	D 🔶									

Road Data (Trip Recorder):

In this menu, the data collected by the ECU (Engine Control Unit) is shared in diagrams from the day the vehicle comes out of the factory. With the help of service interpretation power in the light of the information in these tables, information is being obtained about vehicle's past use and vehicle characteristics. <u>The road data of the vehicle is</u> recorded upon pressing the button indicated with the red arrow and the file is shared when it is requested by the <u>FO Service Engineering</u>.

Diagnosis							۹	۵	€
ECM (Engine Control Module)									
DTCs	ECU ID	Measurements –	Functions	-				Run	
Switchable Air Compre	ssor								
Trip Recorder									

Urea Quality History:

Diagnosis	S
Function - Urea Quality History	
Last X km (%)	
Urea quality in the last 4660 km: 46%	
0 km - 1000 km (%)	
46%	
1000 km - 2000 km (%)	
46%	
2000 km - 3000 km (%)	
46%	
3000 km - 4000 km (%)	
46%	
4000 km - 5000 km (%)	
46%	

Regen Statistics:

You may read regeneration statistics and see how many time regeneration required and canceled by driver.

@ (Diagnosis	🕸 Settings	×	💠 ЕСМ	×			5	[≣	Q	۵	€
											🕻 Back		
E	ECM (En	igine Contro	ol Mo	dule)									
												Run	
	DTCs	ECU IE		Measurements	Functio	ns							
	Regeneration	Statistics											

Oil Reset:

Distance remaining () for the Oil change warning given in the Cluster (Display) is displayed. This warning will be resetted via **Oil change Warning Reset** icon after oil has been changed in the service

Diagnosis	_				Q	۵	€
ECM (Engine	Control Mo	odule)			🗸 Back		
DTCs	ECU ID	Measurements	Functions			Run	
Mistire Detection							
Oil Reset							

Diagnosis	8	⊞	Q	¢	€
				Next	
Function - Oil Reset					
Please turn ignition on. Press exit					

Diagnosis			8	≣	۹	\$	€
					Reset	Oil Warning	Lamp
Function - Oil Reset						Cancel	
	Remaining distance in km to oil change (in h)			.			
0	104,640	120,000					
Distance travelled: 0 km Distance overflow: 0 km Engine working hour: 407 h Hour overflow: 0.0 h							
	Oil Quality: (in)			.			
0.000	0.872	1.000					
Warning: After resetting oil ch position.	nange warning lamp, turn the ignition key position 0, wait for 15	seconds and turn back to ignition	n key				

Low Idle Shutdown:

The shutt-off time at idle can be adjusted over this screen according to the customer request.

🌐 Dia	agnosis					8	⊞	Q	\$	€
								🕻 Back		
E	CM								Run	
	DTCs	ECU ID	Measurements	Functions						
	jection Shut-Off									
In	jector Code IQA									
Lo	ow Idle Shutdown									


Engine Template:

We see real-time values of sensors and valves on the vehicle. In particular, these screens must be used in the related sensor faults.

Diagnosis				٩	\$	€
ECM (Engine Con		K Back				
DTCs EC	CUID Measureme	nts F	Functions		Run	
DPM Priming Test						
Driver Interaction Template						
ECM Flash						
Engine Brake Test						
Engine Template						

Function - Engine Template Exit 11 Fuel Fi Fuel Fill Intercooler

Oil Pressure Oil Temperature Engine Output **24.8** °c 396.0 hPa **25.0** °c Oil Level Total Distance Since First Start 38.9 L 73,111.3 m Fuel Rail Pressure Fuel Level Percentage Value 20.4 L 2,100.0 hPA 4.0 %

Coolant Temperature at

Fuel Rail Pressure Set Point

6,498.0 hPA

Fuel Volume in Fuel Tank

AFTT:

This menu shows the real-time measured values of sensors and valves on the Departronic module, SCR System and Exhaust.



Driver Interaction Template:

This menu shows pedal positions, real-time measured values engine and fan speed.





Air Path Template:

This menu shows the real-time measured values of sensors and valves of air line (turbo-cooler-throttle-manifold-egr).

Diagnosis					۹	٥	€
ECM (Engine	Control Mo	odule)			🕻 Back		
DTCs	ECU ID	Measurements	Functions			Run	
Aftertreatment Templa	te						
Air Heater Test							
Air Path Template							



Extended Configuration parameters in the<u>EMS Module left-hand must be checked absolutely</u>must be checked following Update / Module Programming .

٥	Diagnosis				8	∷	۹	۵	€
							K Back		
	ECM								
								Run	
	DTCs	ECU ID	Measurements	Functions					
	บบาแฐนเลแบบ เ ลเลเกอเอเร	,							
	Delete Long Term Error								
	DPM Priming Test								
	Engine Brake Test								
	Extended Configuration F	Parameter							

	Read Parameters
Function - Extended Configuration Parameter	Write Parameters
① text	Exit

Diagnosis	<u></u>	⊞	Q	¢	Ð
				Apply	
Function - Extended Configuration Parameter				Cancel	
Market					
All EU6 Vehicle +					
Vehicle Type					
Construction -					
Distance (km)					
30000					
Time (day)					
21					
Emission Level					
EU6 •					

Market:

Market should be selected according to the Emission level.

Vehicle Type:

Excluding the Construction series option must be selected for Road trucks and tow trucks.

Distance (km) and Time (days):

Distance and time must be entered according to Market info and Vehicle Type.

Additional Configuration Parameter									
12.7L Ecotorq									
KM Info Day									
	Construction Series	120000KM	83						
All EU6 vehicles	Excluding Construction	150000KM	-						
	9L Ecotorq								
		KM Info	Day						
All ELIE vobielos	Construction Series	60000KM	62						
All EU6 vehicles	Excluding Construction	60000KM	-						

Emission Level:

Selection according to emission level

Engine Power:

Selection according to engine power (330-420-430-480ps)

Project Type:

H476	Road Trucks (garbage truck, sewage truck, firefighting truck etc)
H476C	Construction series (Damper, Mixer, Pump)
H566	Tractor
H625	F-max vehicles

Transmission Type:

Selection according to transmission type on vehicle

Application Type:

If the truck is tow truck select Towing, if it is from the Construction series select Others.

Drive Type:

Selection according to traction system of the vehicle

HVAC - A/C Control Unit:

- Reading ECUID
- VIN Reading/Writing
- DTC Reading/Deleting
- Module Programming
- Configuration Reading/Writing

The above-mentioned features are the same as those described in EMS (Engine Control Unit).

Special Functions & Routines

٥	Diagnosis						<u></u>		Q	۵	€
1	HVAC								🕻 Back		
										Run	
	DTCs	E	ECU ID	Measurements	Functions						
	Configuration	Parameters									
	Special Funtion	ons & Routines	;								
	VIN										
۵							3	⊞	۹	\$	€
		<u> </u>							_	re A/C Eva	_
ł	Function	- Specia	al Funtior	ns & Routines	5				On-D	emand Sel	lf-Test
	Please cl	hoose one Tes	t						A	ssembly Te	est
									Actu	ator Calibr	ation
										Cancel	

EAPU:

0) Diagnosis					3	Q	\$	€
							🗸 Back		
	EAPU						B	lead ECU I	D
	DTCs	ECU ID	Measurements	Functions					
	General			0.000					
	Software Version Vehicle Identificatio	N		0100_6	LAPU CXTP6KKE96455				
	Software Number			NMUKC	CATPORRE90400				
	Soltware Number			246260	10302				

- Reading ECUID
- VIN Reading/Writing
- DTC Reading/Deleting

The above-mentioned features are the same as those described in EMS (Engine Control Unit).

BCU - Vehicle Control Unit:

- Module ECUID
- ➢ VIN Read/Write
- > DTC Read/Write
- > Module Programming
- Calibration Read/Write

The above-mentioned features are the same as those described in EMS (Engine Control Unit).

۵	Diagnosis					0	∷	Q	\$	€
								🕻 Back		
E	BCM									
									Run	
	DTCs	ECU ID	Measurements	Functions						
	_Device Registration	n Test testing only								
	Configuration Paran	neters								

BCU Configuration Parameters:

Ford Otosan Login				
Diagnosis	ē	۹	\$	Ð
			Apply	
Function - Configuration Parameters			Exit	
AC Compressor				
Z Active Emergency Breaking System				
Adaptive Cruise Control				
ADR Vehicle				
✓ Approach Light				
Auto CAB Tilt Battery C Nominal				
225Ah Mutlu-Tubor Battery -				
Battery CCA Nominal				

Rail Light Sensor Module Calibration

Sensor calibration shall be performed when a replacement done.

¢	Diagnosis					C	⊞	Q	۵	Ð
	BCM							🕻 Back		
									Run	
	DTCs E	ECU ID	Measurements	Functions						
	_Device Registration Test	testing only								
	Configuration Parameters									
	Height Sensor Calibration									
	Key Programming									
	Pressure Sensor Calibration	ı								
	Rain Light Sensor Module (F	RLSM) Calibration								
	Diagnosis					0	⊞	۹	۵	Ð
									ОК	
	Function - Rain L	ight Sens	or Module (R	LSM) Calibrat	ion				Exit	
	Conditions to start the F	RLSM calibration								
	 1) Make sure that vehicle 2) Get the Wiper Stalk St 			lion (KL15)						

Key Programming

This programming is used due to recognizing vehicle remote control key with body control unit.

¢	Diagnosis					C	≣	۹	۵	Ð
								🕻 Back		
	BCM							_		
									Run	
	DTCs	ECU ID	Measurements	Functions						
	_Device Registration Test	t testing only								
	Configuration Parameters	5								
	Height Sensor Calibration	ı								
	Key Programming									
~					~ - -					

Diagnosis	3	Q	\$	
		Sta	art Program	ming
Function - Key Programming			Cancel	
Start remote key programming				
Number of already programmend keys				
① 2				

Height Sensor Calibration

e) Diagnosis						2	≣	Q	۵	€
	BCM								🕻 Back		
										Run	
	DT	Cs	ECU ID	Measurements	Functions						
	_Device f	Registration Test	t testing only								
	Configura	tion Parameters	5								
	Height Se	ensor Calibration	1								

That should be applied when ECAS warning lamp activated or any ECAS relevant parts replaced.

- ➢ Run engine
- ECAS does not operate under 6.5 bar pressure. Thus, it must be confirmed that the system has min. 6.5 bar pressure.
- First step is bringing the vehicle to the top position.
- Chock the wheels according to vehicle type by placing calibration wedges (C2AS, C4AS regular, C4AS low liner. C6AS).
- > Lower the vehicle so it seats on the wedge. Save the ride level
- > Bring the vehicle to the top position. Save the top level. Remove the wedge.
- > Bring the vehicle to the bottom position. Save the bottom level.
- If there is no other fault in the vehicle, the instruction is performed automatically with the command «complete calibration». Do not interfere with the vehicle and the software meanwhile.

Pressure Sensor Calibration

٥	Diagnosis							8	⊞	Q	۵	€
										🗸 Back		
	BCM										Run	
	DTCs		ECU ID	Measurements	Functions						Ruii	
						-						
	_Device Regist	tration Test	testing only									
	Configuration F	Parameters										
	Height Sensor	Calibration										
	Key Programm	ning										
	Pressure Sens	or Calibratio	on									

Diagnosis	8	⊞	۹	¢	€
			St	art Calibrat	ion
Function - Pressure Sensor Calibration				Cancel	
Please be sure that engine is running, air pressure of vehicle is 10 bar at least and also height sensor calibration must be completed.					

- ➢ Run engine
- ECAS does not operate under 6.5 bar pressure. Thus, it must be confirmed that the system has min. 6.5 bar pressure.
- > Bring the vehicle to bottom position prior to «Start calibration» command.
- Click the «Start calibration» button.
- > Calibration is completed in 100 seconds.

T-Cluster/Cluster /IC- Display:

- Reading ECUID
- VIN Reading/Writing
- DTC Reading/Deleting
- Module Programming
- Configuration Reading/Writing

The above-mentioned features are the same as those described in EMS (Engine Control Unit).

PATS:

Key pair count needs to be done when the module or vehicle keys are changed because of immobilizer function. This is done through the PATS tab under Cluster menu. The operation needs Ford Otosan Service Engineering approval and ticket must be raised. To start the operation, "Pats timed Access" needs to be clicked.

0	Diagnosis					Ð	⊞	۹	\$ Ð
								🕻 Back	
	IC								
	DT	Cs	ECU ID	Measurements	 Functions				
	Buzzer (L	.eft/Right) Test							
	Configura	tion Parameters							
	PATS Clu	ster or Cluster 8	ECM Change						
	PATS Era	se Programmed	l Keys						
	PATS On	ly ECM Change							
	Read Key	/s							
	Read Od	ometer							

Read Odometer

@ (Diagnosis						8	⊞	Q	۵	€
									🕻 Back		
10	С									Run	
	DTCs		ECU ID	Measurements	Functions						
	PAIS Cluster	or Cluster	& ECM Change								
	PATS Erase F	^o rogramme	d Keys								
	PATS Only EC	CM Change									
	Read Keys										
	Read Odome	ter									



Vehicle Guardian

	Diagnosis					2	⊞	Q	۵	€
	IC							🕻 Back		
	DTCs		CU ID	Measurements	Functions				Run	
	PAIS Cluster	or Cluster & E0	CM Change							
	PATS Erase F	Programmed Ke	eys							
	PATS Only EC	CM Change								
	Read Keys									
	Read Odome	ter								
	Vehicle Guard	lian								
☆					Ford Otosan Login					0 ×
_	🖨 Diagnosis					2	≣	۹	\$	€
									Exit	



EBS - Electronic Brake System:

Sensor Calibration:

Sensor calibration must be done if steering angle sensor (SAS) or yaw rate sensor (YRS) are replaced. Sensor calibration must be done on a flat surface while the wheels are parallel to each other at forward direction. If programming is done, then a certain mileage needs to be done to see that the ESP lamp blinking is stopped.

¢	Diagnosis								õ	⊞	Q	¢	€
	EBS										🕻 Bac	ĸ	
	EDO												
	DTCs		ECU ID	Me	surements	 Functions							
	Configuration	Parameters											
	SAS & YRS C	alibration											
	VIN												

WARNING!: If the EBS/ESP lamps are on on the panel even though the EBS Module "Sensor Calibration" is successfully completed, the vehicle is driven on straight road until the lamp turns off.

DTCO Stoneridge - Digital Tachograph:

- Reading ECUID
- VIN Reading/Writing
- DTC Reading/Deleting
- Configuration Reading/Writing

Retarder

- Reading ECUID
- VIN Reading/Writing
- DTC Reading/Deleting
- Configuration Reading

ACM 2 DIN - Multimedia Unit (2 DIN):

- Reading ECUID
- DTC Reading/Deleting

The above-mentioned features are the same as those described in EMS (Engine Control Unit).

PCCM - Cruise Control Module

- Device Replacement
- VIN Read/Write
- DTC Read/Write
- Flash Programming
- Calibration Read/Write
- Device Registration

The above-mentioned features are the same as those described in EMS (Engine Control Unit).

Device Register:

In vehicles with a PCCM module replaced for any reason, this operation is performed following the device replacement (30 minutes after the successful result of the previous operation). If the process is successfully completed, ConnecTruck services will continue to work with the new PCCM and SIM card.

Teşhis				8	⊞	Q	\$	€
Teşhis						🗸 Geri		
DTC'ler	Kimlik Verileri	Ölçümler	Fonksiyonlar					
Configuration Par	ameters							
Device Registrati	on							
Device Replacem	ent							
VIN								
FORD OTOS	AN • F-MAX • H625					12.40	⁄ ⊡ · ~	⁄ • 🚘

Device Replacement:

For vehicles that have previously been paired with PCCM - vehicle (chassis number) and the PCCM module has been changed for any reason, this process must be done via FODiT. If the result of the transaction is successful based on the approval of the relevant electronic ticket request for this process and if a new device is to be registered, at least 30 minutes should be waited for the information to be updated on the ConnecTruck services before the new device is registered.

Diagnosis	۹	۵	Ð
AMT (Transmission Control Unit)	🕻 Back		
DTCs ECU ID Measurements Functions		Run	
AMT update Clutch Installation Clutch Touch Point Configuration Parameters Slope Sensor Calibration			
VIN	26.64	v 🗖 • 🗸	/ • 🛋

- Reading ECUID
- VIN Reading/Writing
- DTC Reading/Deleting

The above-mentioned features are the same as those described in EMS (Engine Control Unit).

Module Programming:

When the following screen is displayed;

For construction series vehicles: Construction For non-construction series vehicles (Road Truck and Tractor): Non Construction

Writing Configuration:

If there is a PTO application in <u>automatic transmission</u> vehicles, the **PTO option** must be selected from the AMT Module configuration writing process.

Diagnosis		2	≣	Q	۵	Ð
					Apply	
Function - Co	nfiguration Parameters				Exit	
Not Exist						
Exist (Stationary)						
Exist (Instationary)						

Slope Sensor Calibration:

- Uploading current level calibration to the transmission with FODiT
- On vehicles with air suspension, take the vehicle height to the Driving Position (run the vehicle until air tank pressure is full) until the vehicle is started up (as if the moment when driver's seat is lifted) With the ECAS control, the chassis will be brought to the driving position when the vehicle is completely on even ground.
- The ignition is turned off, FODiT is connected, and then the ignition is turned off again at the II position following Slope Sensor writing procedure, the vehicle is kept at the sleep mode for 10 sec.
- When the ignition is turned on again, the writing process will be completed.
- In vehicles with mechanical suspension, when the <u>vehicle is on flat ground</u>, the parameter will be printed with the FODiT in the ignition II position, and the system will be closed and opened.

The requirement for this operation on the service side will be after any software update.

In an external case; if the software in the vehicle is already up-to-date and only the slope sensor is wanted to be written:

First the error code needs to be read and deleted, then the vehicle must be set to sleep mode, and then the vehicle is restarted so the procedures above can be performed.



Clutch Installation

In order to Conact (Clutch middle Center) show the pad status correctly following Clutch Installation procedure has to be performed.



Clutch Touch Point:

Clutch sensor identification is required by following the instructions described below.

٥	Diagnosis					2	⊞	۹	۵	€
	A N 47							🕻 Васк		
	AMT								Run	
	DTCs	ECU ID	Measurements	Functions						
	Clutch Installation									
	Clutch Touch Point									

TPMS - Tire Pressure Monitoring Unit

۵	Diagnosis								:	□	Q	۵	€
-	TPMS										🕻 Back		
	DTCs		ECU ID	N	leasurements	 Functions	_						
	Configuration	Parameters											
	VIN												
	Write sensor	ID location											

- Reading ECUID
- VIN Reading/Writing
- DTC Reading/Deleting

The above-mentioned features are the same as those described in EMS (Engine Control Unit).

Configuration Reading/Writing:

Diagnosis		2	▦	۹	۵	Ð
					Apply	
Function - Configuration Parameters					Exit	
Number of Antennas fitted						
3 antennas						
Placard Pressure of Axle 1						
8500 mBar						
Placard Pressure of Axle 2						
9000 mBar						

Configuration of the Number of Antennas:

To Be selected.

1 and 2: Axle Reference Pressure:

To Be selected.

Placard Pressure of Axle 1		
8500 mBar	-	
Placard Pressure of Axle 2		
9000 mBar	-	

Write Sensor ID Location

@ C	liagnosis							:	≣	۹	۵	Ð
-										< Back		
I	PMS										Run	
	DTCs		ECU ID	Measurements	 Functions							
	Configuration I	Parameters										
ľ	VIN											
	Write sensor II	D location										

	Exit
Function - Write sensor ID location	Write Configuration
Please select a wheel over the button bar.	Front Left Wheel
	Front Right Wheel
	Rear Left Outer Wheel
	Rear Left Inner Wheel
	Rear Right Inner Wheel
	Rear Right Outer Wheel

FLINE / ADAS

The new modules added with the new truck are as follows:

- CGW Central Gateway
- FLC Forward Looking Camera
- Front Looking Side SRR Short Range Radar
- Front SRR Front Short Range Radar
- Rear Looking Side SRR Short Range Radar
- LRR Long Range Radar
- VCU Vehicle Control Unit

When the FODIT application is opened, the following category should be selected to connect to the vehicle.



The modules that come after the vehicle is scanned are as follows. New modules are shown with red arrow.

Diagnosis					0		۹	≡
	ECUs					Res Show al	I DTCs	
		System 1	Status	DTCs	┢	Delete a		
	▲	ACM (Audio Control Module)	Available	9				
	A	AMT (Transmission Control Unit)	Available	13				
	A	BCM (Body Control Module)	Available	6				
	A	CGW (Central Gateway)	Available	3				
	▲	DTCO (Digital Tachograph)	Available	4				
	×	EAPU (Electronic Air Processing Unit)	Not available					
	~	EBS (Electronic Braking System)	Available	0				

Diagnosis					0	⊞ C	< ≡
	ECUs				E	Resca Show all [OTCs
		System ↑	Status	DTCs	┢	Delete all I Print DTC	
	▲ੈ	ECM (Engine Control Module)	Available	10			
	×	EHPAS (Electro-Hydraulic Power Assisted Steering)	Not available	?			
	A	FLC (Forward Looking Camera)	Available	2			
	A	Front Looking Side SRR (Short Range Radar)	Available	7			
	A	Front SRR (Front Short Range Radar)	Available	4			
	A	IC (Instrument Cluster)	Available	15			
	A	LRR (Long Range Radar)	Available	38			

Diagnosis	Diagnosis									
	ECUs						Rescan now all D1	ГСs		
		System 1	Status	DTCs			elete all D			
	×	RASC (Rear Axle Steering Controller)	Not available							
	A	Rear Looking Side SRR (Short Range Radar)	Available							
	▲	Retarder	Available	2						
		SSL (Stalk Shifter - Left)	Available	2						
	▲	SSR (Stalk Shifter - Right)	Available	2						
	▲	TCU (Telematics Control Unit)	Available	3						
	A	TPMS (Tire Pressure Monitoring System)	Available	1						

Diagnosis					3	<u>≣</u> Q	. ≡
	ECUs					Rescar Show all D	
	A	System ↑ Rear Looking Side SRR (Short Range Radar)	Status Available	DTCs 7		Delete all D Print DTC re	
	A	Retarder	Available	2			
	A	SSL (Stalk Shifter - Left)	Available	2			
	A	SSR (Stalk Shifter - Right)	Available	2			
	A	TCU (Telematics Control Unit) TPMS (Tire Pressure Monitoring System)	Available Available	3			
	A	VCU (Vehicle Control Unit)	Available	12			

CGW – Central Gateway

CGW is the central communication node, acts as a router and is the first gate for all data coming into the vehicle. It supports various bus systems (Ethernet, CAN, LIN).

The features of Central Gateway Module are as below:

- Data Routing and Management
- Network Security
- Inter-System Communication
- Diagnostics and Troubleshooting
- Data Collection and Storage
- External Communication
- Update and Upgrade Capabilities (OTA)

You can enter the module by clicking on the module indicated by the red arrow below.

🔅 Diagnosis					2		۹	
						Re	escan	
	ECUs					Show	all DTC	S
		System 1	Status	DTCs		Delete Print D		
	▲	ACM (Audio Control Module)	Available	9				
	▲	AMT (Transmission Control Unit)	Available	13				
	▲	BCM (Body Control Module)	Available	6				
	▲	CGW (Central Gateway)	Available	3				
	▲	DTCO (Digital Tachograph)	Available	.4				
	×	EAPU (Electronic Air Processing Unit)	Not available					
	~	EBS (Electronic Braking System)	Available	o				

There are two functions in the module:

- Module programming
- Read/Write Vehicle Identification Number

Diagnosis	🗢 Settings X	ତି 🗉 ଦ ≡
		< Back
(CGW (Central Gateway)	
	DTCs ECU ID Measurements Functions	
	Module Programming	
	Read/Write Vehicle Identification Number	

FLC – Forward Looking Camera

The camera is a one box system design with a RCCB filter and Real Time CPU. The image sensor combines high resolution, high sensitivity and high-quality color separation.

Diagnosis	3	⊞	۹	≡

You can enter the module by clicking on the module indicated by the red arrow below.

						Rescan			
	ECUs								
			Status	DTO-		Delete all DTCs			
		System 1	Status	DTCs		Print DTC report			
	▲ੈ	ECM (Engine Control Module)	Available	10					
	×	EHPAS (Electro-Hydraulic Power Assisted Steering)	Not available	?					
	▲	FLC (Forward Looking Camera)	Available	2					
	▲	Front Looking Side SRR (Short Range Radar)	Available	7					
	▲	Front SRR (Front Short Range Radar)	Available	4					
	▲	IC (Instrument Cluster)	Available	15					
	A	LRR (Long Range Radar)	Available	38					

There are three functions in the module:

- Module programming
- Read/Write Vehicle Configuration Parameters
- Read/Write Vehicle Identification Number

Diagnosis	🏚 Settings 🛛 🗙	ତି 🗉 ର ≡
		< Back
	FLC (Forward Looking Camera)	
	DTCs ECU ID Measurements Functions	
	Module Programming	
	Read/Write Configuration Parameters	
	Read/Write Vehicle Identification Number	

Front Looking Side SRR, Front SRR, Rear Looking Side SRR – Short Range Radar

The sensor is a 77 GHz short range radar sensor with a digital beam-forming scanning antenna.

The features of the module are as below:

- Symmetric beam pattern in elevation.
- High speed CAN Interface
- Continuous alignment capability / misalignment detection during normal operation
- Sensor blockage detection
- Radar Interference Detection and Mitigation (RIM)
- Auto Service Alignment without special tools for service stations (the radar calibrates itself while driving)

Front Looking Side SRR – Short Range Radar

Diagnosis							⊞ (ર ≡
ECUs							Resca Show all	DTCs
		System ↑	Status	DTCs			Delete all Print DTC	
	▲≛	ECM (Engine Control Module)	Available	10				
	×	EHPAS (Electro-Hydraulic Power Assisted Steering)	Not available	?				
	A	FLC (Forward Looking Camera)	Available	2				
	▲	Front Looking Side SRR (Short Range Radar)	Available	7				
	▲	Front SRR (Front Short Range Radar)	Available	4				
	A	IC (Instrument Cluster)	Available	15				
	A	LRR (Long Range Radar)	Available	38				

- Read/Write Configuration Parameters
- Read/Write Vehicle Identification Number

Diagnosis	🕸 Settings	×	:	🗉 C	२ ≡	
-	Front Looking	g Side SRR (Short Range Radar)	< Bac			
-		Measurements				
	Read/Write Configura	ation Parameters				
	Read/Write Vehicle Io	Ientification Number				

Front SRR – Front Short Range Radar

Diagnosis					0	⊞ C	≳ ≡
	ECUs				E	Resca Show all D	DTCs
		System ↑	Status	DTCs	┢	Print DTC	
	▲ੈ	ECM (Engine Control Module)	Available	10			
	×	EHPAS (Electro-Hydraulic Power Assisted Steering)	Not available	?			
	A	FLC (Forward Looking Carnera)	Available	2			
	A	Front Looking Side SRR (Short Range Radar)	Available	7			
	A	Front SRR (Front Short Range Radar)	Available	4			
	A	IC (Instrument Cluster)	Available	15			
	A	LRR (Long Range Radar)	Available	38			

- Read/Write Configuration Parameters
- Read/Write Vehicle Identification Number



Rear Looking Side SRR – Short Range Radar

🔅 Diagnosis					3		ৎ ≡	Ē
	EOU					Re	scan	
	ECUs						all DTCs	
		System ↑	Status	DTCs			all DTCs	H
	A	Rear Looking Side SRR (Short Range Radar)	Available	7				Γ
	▲	Retarder	Available	2				
	▲	SSL (Stalk Shifter - Left)	Available	2				
	A	SSR (Stalk Shifter - Right)	Available	2				
	A	TCU (Telematics Control Unit)	Available	3				
	A	TPMS (Tire Pressure Monitoring System)	Available	1				
	▲	VCU (Vehicle Control Unit)	Available	12				

- Read/Write Configuration Parameters
- Read/Write Vehicle Identification Number

Diagnosis 🗘 Settings 🗙	ତ ≣
Rear Looking Side SRR (Short Range Radar)	K Back
DTCs ECU ID Measurements Functions	Kun
Read/Write Configuration Parameters	
Read/Write Vehicle Identification Number	

LRR – Long Range Radar

The radar sensor is a 77 GHz radar sensor with digital beam-forming scanning antenna which offers two independent scans for far and short range.

The features of the module are as below:

- Software to operate the sensor and the desired functions.
- Auto Service Alignment without special tools for service stations (the radar calibrates itself while driving)
- Elevation measurement feature (ability to detect objects)

Diagnosis						Q	≡
	ECUs					scan all DTCs	S
		System 1	Status	DTCs	Delete Print D		_
	▲ [±]	ECM (Engine Control Module)	Available	10			
	×	EHPAS (Electro-Hydraulic Power Assisted Steering)	Not available	?			
	A	FLC (Forward Looking Camera)	Available	2			
	A	Front Looking Side SRR (Short Range Radar)	Available	7			
	A	Front SRR (Front Short Range Radar)	Available	4			
	A	IC (Instrument Cluster)	Available	15			
	A	LRR (Long Range Radar)	Available	38			

- Read/Write Configuration Parameters
- Read/Write Vehicle Identification Number

Diagnosis 🏚 Settings X	5 ⊞ ۹ ≡
	< Back
LRR (Long Range Radar)	
DTCs ECU ID Measurements Functions	
Read/Write Configuration Parameters	
Read/Write Vehicle Identification Number	

VCU – Vehicle Control Unit

Due to the large number of functions managed by the BCM, a new Vehicle Control Unit (VCU) has been integrated into the module structure of F-LINE vehicles to reduce the load on the module and ensure smoother vehicle operation.

Diagnosis					0	≣ Q	≡
	ECUs	;				Rescan Show all DT	
		System ↑	Status	DTCs	┝─	Print DTC rep	
	A	Rear Looking Side SRR (Short Range Radar)	Available	7		Plint Dicite	pon
	A	Retarder	Available	2			
	▲	SSL (Stalk Shifter - Left)	Available	2			
	A	SSR (Stalk Shifter - Right)	Available	2			
	A	TCU (Telematics Control Unit)	Available	3			
	A	TPMS (Tire Pressure Monitoring System)	Available	1			
	A	VCU (Vehicle Control Unit)	Available	12			

- Auto Drop Calibrations
- Height Sensor Calibration
- Module Programming
- Pressure Sensor Calibration
- Read/Write Vehicle Identification Number

Diagnosis	🔅 Settings	×	2	⊞	Q	≡
			< в	ack		
١	VCU (Vehicle	e Control Unit)				
	DTCs ECU ID	Measurements Functions				
	AutoDrop Calibrations	S				
	Height Sensor Calibra	ation				
	Module Programming					
	Pressure Sensor Cali	bration				
	Read/Write Vehicle Id	Ientification Number				