Instruction Sheet

IS-19914

Volvo 9700 ELD Interface Kit for OBD Vehicles

First Release

06-27-2019

APPLICATION

Model	VIN
Volvo 9700 Model Year : 2014 and up	From 3CET2S222 E 5 <u>162000</u> up to 3CET2V923 <u>J</u> 5 <u>191913</u>

MATERIAL

Order Kit # 7775126 which includes the following parts:

Part No.	Description	Qty
23446648	ELD Harness OBD	1
20890176	Control Unit FMS Gateway	1
390038	ELD Decal	1
23338070	OBD Decal (Volvo)	1
952641	Adel Clamp Rub #35	1
952634	Adel Clamp Rub #24	1
500124	Screw SS #8X1/2	4
504637	Cable tie Nylon STD Black	15
FI-19914	Instruction Sheet (FR)	1
IS-19914	Instruction Sheet (EN)	1

Equipment required:

Description	Qty
Laptop with PTT (Premium TechTool, latest version installed) & related cables.	1

NOTE

Material can be obtained through regular channels.

PROCEDURE



DANGER

Park vehicle safely, apply parking brake, stop engine. Prior to working on the vehicle, set the ignition switch to the OFF position. Wait 20 seconds and set the main switch and the battery switch to the OFF position. Disconnect negative terminals from the batteries.

Lock out & Tag out (LOTO) must be performed during set-up, maintenance or repair activities. Refer to your local procedure for detailed information regarding the control of hazardous energy.

PART 1: FMS GATEWAY MODULE INSTALLATION

1. Open the electrical compartment located behind the driver's seat.



2. Remove both drivers' lateral utility compartment doors.



- 3. Remove the vehicle OBD connector from the underside of the dashboard (drivers' side).
 - Unclip the black plastic cap securing the connector to the bracket (do not discard the plastic cap).
 - Remove the connector from the bracket.



4. Route the ELD interface harness **23446648** from the electrical compartment up to the driver's area (OBD connector area).



- From the electrical compartment, route the OBD side of the harness (with red connector) inside the lateral utility compartment.



- Pass the harness from the lateral compartment to the driver's foot area (OBD connector area).



5. Connect the vehicle OBD connector (previously removed from the bracket) to the ELD harness red connector.



- 6. Secure the ELD harness OBD connector (black) to the bracket.
 - Insert the connector in the bracket opening and secure (clip in place) using the black plastic cap.



7. Inside the electrical compartment, secure the ELD FMS gateway module **20890176** to the compartment wall inside the dotted area shown.



- Make a support bracket for the module using the supplied #35 Adel clamp **952641** as shown.



- Secure the module to the compartment wall using the supplied **500124** screws (module connector facing down). Connect the ELD harness *green* connector to the gateway module.



- 8. (Optional step) If using a Volvo branded ELD device (part # 7770385 or 7770388). Secure the ELD device next to the gateway module using the supplied #24 Adel clamp **952634** (connector facing down).
 - Make a support bracket for the module using the Adel clamp and secure to the electrical compartment wall next to the FMS Gateway module.
 - Connect the module to the ELD harness round 9 PIN connector (remove gray protective cap) using the adaptor cable supplied with the ELD module.



NOTE Do not discard the gray protective cap. Secure the cap to the cable using a small cable tie.

9. Secure the ELD harness inside the electrical compartment, at the bottom of the lateral utility compartment and under the dash using cable ties.



Make sure the harness is not interfering with the controls or the driver's movements under the dash area.

- 10. Install ELD and OBD warning decals.
 - Install the OBD decal **23338070** on the lower part of the dashboard (above the OBD connector). When using a Volvo ELD device, also install the ELD decal **390038** over the ELD device in the electrical compartment.



11. Reinstall the electrical compartment cover and lateral compartment doors.

PART 2: FMS GATEWAY MODULE PROGRAMMING

1. Connect to PTT (Premium Tech Tool) and confirm in the product tab that the FMS gateway (MID 179) is present in the Product Data but not in the Central Data.

ch Tool Links Help C	ontrol Unit Data Mismatch						Sa Jean R
roduct Product History Diagnose Tes elected Product (BR13 718025)	Centrol Unit Data Mismatch The product data and central systems - There are control units in the produ- Due to the mismatch, some operation Select an item in the table to view det	data do not match. It that are not registe s may not be availat alls about the contro	iried in central ke. I unit.	systems.		×	🐺 Finish Wor
roduct Details				Readout	Dime: 16/11/2	017 3:13 PM	
Danais ID	Control Unit	Product Data	Central Data	Hardware	Sub hardware	e Software	Validated
R12710025	Telematics Gate/Way (TG/W)	0	0	•		•	16/11/2017 3:13 PM
Aodet	Aftertreatment Control Module (ACM)	•	•	۲	•	•	16/11/2017 3.13 PM
1R12	Engine Control Module (EMS)	9	0	٢		0	16/11/2017 3 13 PM
mission Level:	FMS Gateway (MID 179)	•	•				
JS14 = OBD2016	Radio (MIO 206)	•	•	•		0	
Jectrical System:	Information display (MID 140)	•	•	•	•	•	
Autiplexed version 3	Vehicle ECU (MID 144)	•	•	•	•	•	
onnectivity							Readout Time: 16/11/2017 3 12 Pt
Ratus Description							
VOCOM/98890025/98840133 (USB) is connected	Defails (Telematics GateWay (TGW))						
 The selected product PREVH 713472 is connect Product Data Retrieved. 	Filendware 🥝						
Central Data Retrieved:	5oftware 🙄						
			۵			Close	

2. In Premium TechTool, select PROGRAM tab. In PROGRAM tab, select operation <u>1700-22-03-06</u> <u>Accessory Kit</u> then clicks START.

Tech Tool	
Tech Tool Links Help	😼 Jean Rut
Product Product History Diagnose Test Calibrate Program Impact	
Program	1700-22-03-06 Accessory Kit
Select an operation and click Start	To run the operation in simulation mode select Run as simulated
1700-08-03-39 Program Electronic Control Unit	Run as simulated
1700-22-03-03 Parameter, programming 1700-22-03-03 System Date and Time	Description
1700-22-03-06 Accessory Kit	The operation will program Electronic Control Units in the product according to what is exercised in the Accessory kit
1700-22-03-11 Campaign	The operation will program electronic control offics in the product according to what is specified in the Accessory sit
1700-22-03-12 Replace Hardware	
1700-22-03-13 Program with Stored Software	Note: It may be necessary to perform calibrations after an Electronic Control Unit has been programmed
1700-08-03-40 Handle Component	
1700-22-03-14 Synchronize electronic control unit data	
3810-22-03-10 Change Language	
3837-22-03-01 Odometer programming	
	Start>

3. Enter Accessory kit number **85153392** Click on PROGRAM button below and then follow the instructions. The programming process will start.

ch Tool	
ach Tool Links Help	🖏 Jean Rur
roduct Product History Diagnose Test Calibrate Program Impact	
Programming Steps Retrieving software part numbers	1700-22-03-06 Accessory Kit Enter an accessory kit number and click Program to apply the kit Kit number: Enter an accessory kit number Enter an accessory kit number
Reading out transferable parameters from affected Electronic Control Units	
Downloading software from central systems	
Programming Electronic Control Units	
Programming completed	
	/
	Program > Cancel
sels ID: PREVH 713472 - VIN: 2PCH348HC713472 - Work Order: Inst	Canor

4. If the following message pops-up click YES.

Tech Tool	a manage street		
Tech Tool Links Help			📑 Jean Ruel
Product Product History Diagnose Test	Calibrate Program Impact		
		1700-22-03-06 Accessory Kit	
Programming Steps		The following Electronic Control Units will be programmed	
Retrieving software part numbers		FMS Gateway (MID179)	
Reading out transferable parameters from affected Ele	ctronic Control Units		
Downloading software from central systems	Warning		
Testing programming speed	Unable to read parameter The features programmed to this p state.	s roduct could not be retrieved. The product will be reset to its original	
Programming Electronic Control Units	Do you want to continue?		
Programming completed		Yes No	
			Continue > Cancel
Chassis ID: PREVH 713472 V/IN: 2PCH33499HC713472 Work (Order: test		Reduct 🐼 Online

- 5. When prompted, proceed with the following actions:
 - Turn the ignition key to the OFF position.
 - Wait 10 seconds.
 - Turn the ignition key to the ON position.

NOTE		
Second programming step "Reading out transfer Units" will show as incomplete with this symbol \triangle ;	rable parameters from affected Electronic Control This is normal with a new module installation.	
🕙 Tech Tool		
Tech Tool Links Help	🛃 Jean Ruel	
Product Product History Diagnose Test Calibrate Program Impact		
	1700-22-03-06 Accessory Kit	
NOTE Second programming step "Reading out transferable parameters from affected Electronic Control Units" will show as incomplete with this symbol ①; This is normal with a new module installation. Tech Tool Tech Too		
	The following Electronic Control Onlis will be programmed	
 Retrieving soltware part numbers 	FMS Gateway (MID179)	

		1
A Reading out transferable parameters from affected E	lectronic Control Units	
Cownloading software from central systems		
Testing programming speed		
Programming Electronic Control Units Turn the ignition key to OFF position Wait 10 seconds Turn the ignition key to ON position	€	
Programming completed		

6. Wait for the program to upload; this can take a few minutes.

IMPORTANT - If an error message regarding <u>code 118 "Failed to read fault codes"</u> shows up, click <u>NO</u>. This will not affect the programming although programming will mark as failed.

Product Product History Diagnose Test Calibrate Program	Impact
	1700-22-03-06 Accessory Kit
Programming Steps	The following Electronic Control Units will be programmed
✓ Retrieving software part numbers	FMS Gateway (MID179)
A Reading out transferable parameters from affected Electronic Control Units	
Covering software from central systems	
Testing programming speed	E E
ຈີ່ເຈົ້ອກະ Programming Electronic Control Units	
60%	
Turn the ignition key to OFF position	
Wait 10 seconds	
V Turn the ignition key to ON position	

7. Once completed, make sure the FMS gateway is now visible in the Central Data and all other related sections as shown below.

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lech Tool	ol Links Help	Control Unit I	nformation					E		🏹 🛛 Jean Ri
Product	t Product History Diagnose	res 🔬 Cor Sele	trol Unit Information act an item in the table to view of	letails about the contro	ol unit.			×		
						Readout	Time: 16/11/20	17 3:29 PM		
Sa Ret	tresh @ Settings 🔍 Manual Selectio	Control L	Init	Product Data	Central Data	Hardware	Sub hardware	Software		Finish Work
roduct	Details	Telematic	s GateWay (TGW)	e	S	0	e	S		
hassir	s ID:	Aftertreat	ment Control Module (ACM)	0	0	0	0	0	Validate	d
REVH	713472	Engine C	ontrol Module (EMS)	0	S	0	e	0	16/11/20	17 3:29 PM
odel:		Radio (MI	D 206)	0	0	0	0	0	16/11/20	17 3:29 PM
REVH	l i i i i i i i i i i i i i i i i i i i	Informatio	n display (MID 140)	0	0	0	0	0	16/11/20	17 3:29 PM
missic	on Level:	Vehicle F	CU (MID 144)	Ø		0	0	0		
S14 + I	OBD2016	FMS Gate	way (MID 179)	e	0	0	0	0		
lectric	cal System:			-		-				
ultiples	wed version 5									
nnecti	tivity								Readout Time: 16/11/2	017 3:29 P
tatus	Description	Details (F)	AS Gateway (MID 179))							
v	VOCOM/88890020/88840133 (USB) is conn	ecte	FMS Gateway (MID 179)	20890176	0890176	07101278	07101278			
0	Product Data Retrieved:	eco								
0	Central Data Retrieved:	✓ Softw	are 🥝							
			MSW FMS Gateway	Part Number Product Data	Central Data			-		
			DS1 FMS Gateway	23155914	3155914					
			DS2 FMS Gateway	23155915	3155915			-2		
								1		
								Close		
								0.030		
sis ID:	PREVH 713472 VIN: 2PCH33499HC713472	Work Order: test							Prod	uct 🥑 On

8. Refresh and delete codes.

PARTS / WASTE DISPOSAL

Discard waste according to applicable environmental regulations (Municipal/State[Prov.]/ Federal)