

PREVOST

Instruction Sheet

IS-17071

Volvo ELD interface kit for OBD Vehicles

APPLICATION

Model	VIN
H3 Series Vehicles Model Year : 2013 to 2018	From 2PCH33499 <u>DC712364</u> up to 2PCH33496 <u>JC710082</u>
X3 Series Vehicles Model Year : 2014 to 2018	From 2PCG33497 <u>EC735459</u> up to 2PCCS3491 <u>JC736280</u>

MATERIAL

Kit #069800 includes the following parts:

Part No.	Description	Qty
061890	ELD Harness OBD	1
20890176	Control Unit FMS Gateway	1
380120	Connector Bracket	1
380121	FMS Gateway Bracket	1
390038	ELD Decal	1
390039	OBD Decal	1
500855	Washer Flat N500 .188X.438X.049	2
502868	Screw TC TR PH N500 #10-16 X 1/2	6
504637	Cable tie Nylon STD Black	20
566004	Panel Nut Size 18	1
566006	Lock Washer for Panel Nut	1
563160	Terminal - Yazaki 2 PIN Connector	1
560587	Ground terminal – Round (16-14) 1/4"	1
FI-17071	Instruction Sheet (FR)	1
IS-17071	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.

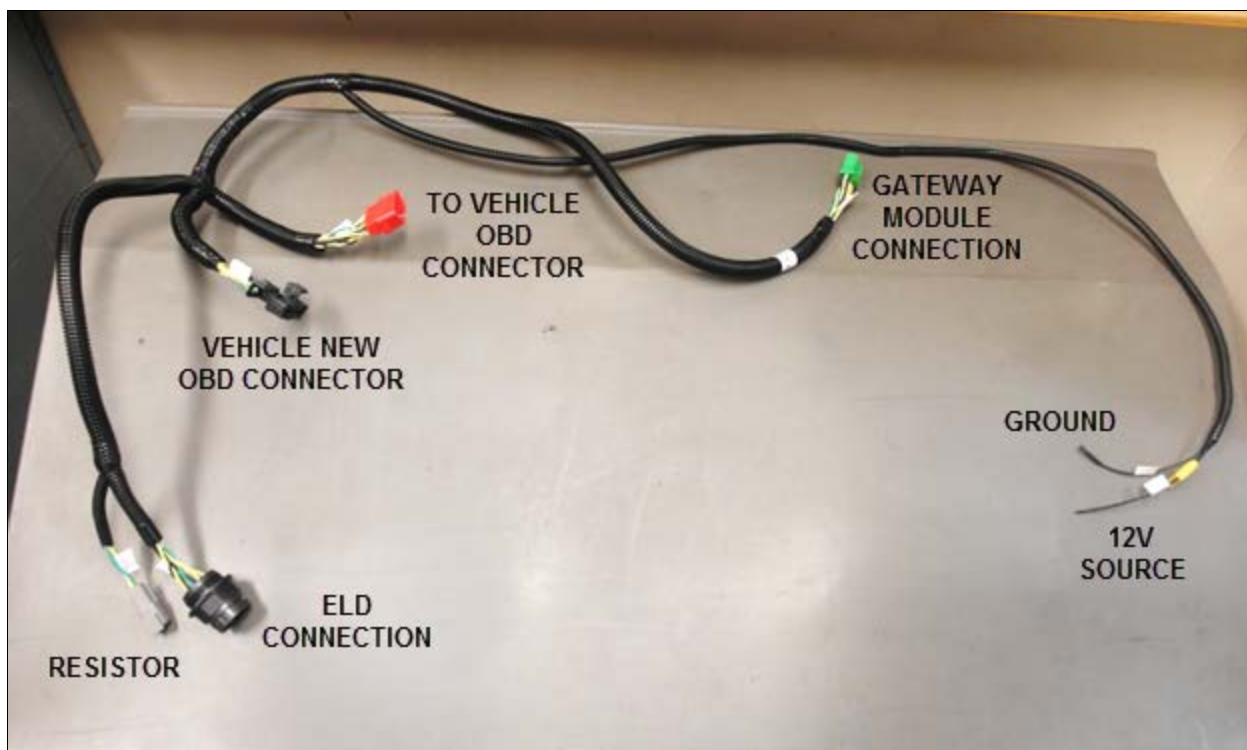
PROCEDURE



DANGER

Park vehicle safely, apply parking brake, stop engine. Prior to working on the vehicle, set the ignition switch to the OFF position and trip the main circuit breakers equipped with a trip button.

PART 1: FMS GATEWAY MODULE AND HARNESS INSTALLATION



HARNESS CONNECTION IDENTIFICATION

1. Open the vehicle front electrical compartment door and remove/open the junction box protective panel.



FRONT JUNCTION BOX PROTECTIVE PANEL (H3 VEHICLE SHOWN)

2. Locate the future ELD gateway module (**20890176**) position at the left corner of the front junction box.



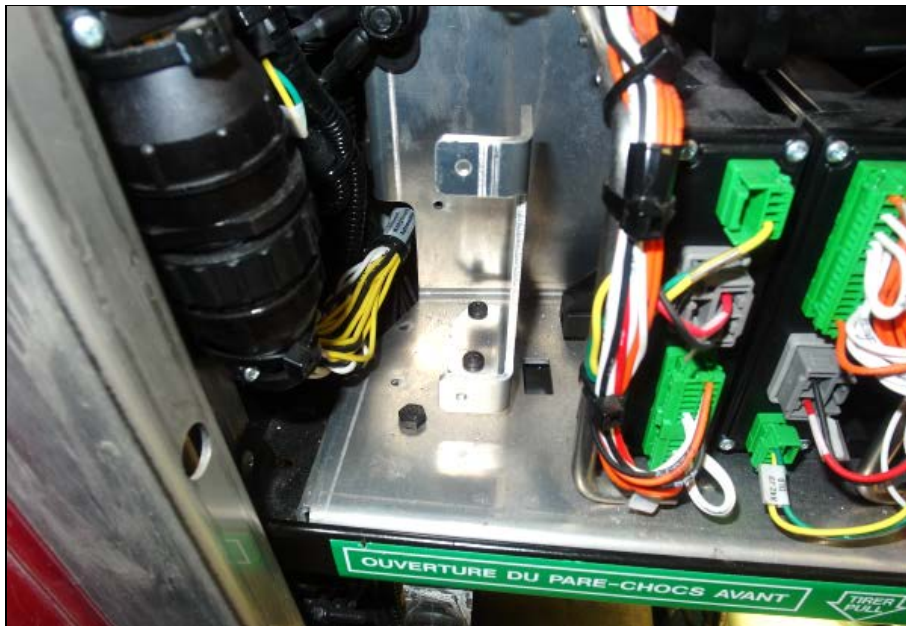
MODULE POSITION IN FRONT JUNCTION BOX (H3 SHOWN, X3 SIMILAR LOCATION)

3. Install the gateway module bracket (**380121**) on the “floor” of the junction box.
 - Bracket should be positioned as far rearward as possible (temporary install the module on the bracket – module should almost touch the back panel).

NOTE

Late production vehicles may already have two pre-drilled holes for bracket installation – Make sure holes are positioned properly (far back) to clear vehicle harness and plastic protective panel before securing bracket/module.

- If no holes are factory drilled or if holes are not positioned properly, mark the bracket lower tab and screw holes positions with a sharpie and drill the two screw holes using an angle drill and a 9/64" (3mm) drill bit.
- Secure the bracket on the junction box floor using two of the supplied #10 screws (**502868**).



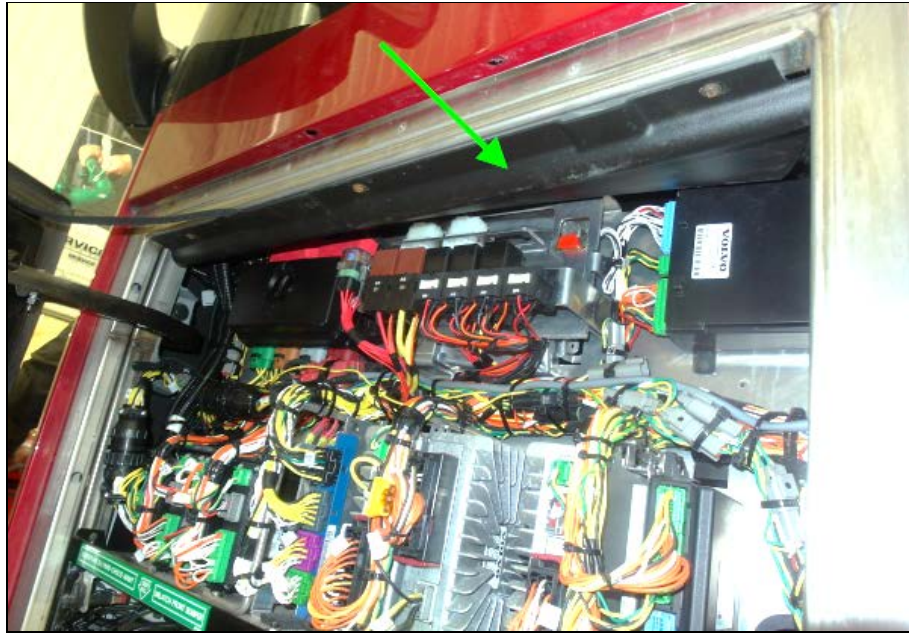
EXAMPLE OF REPOSITIONED BRACKET VS ORIGINAL HOLES POSITION

4. Secure the gateway module to the bracket using two supplied screws (**502868**) and flat washers (**500855**).



GATEWAY MODULE ON BRACKET - USE FLAT WASHERS

5. On H3 vehicles, remove the front junction box plastic gutter panel to allow direct access to the under dash area.



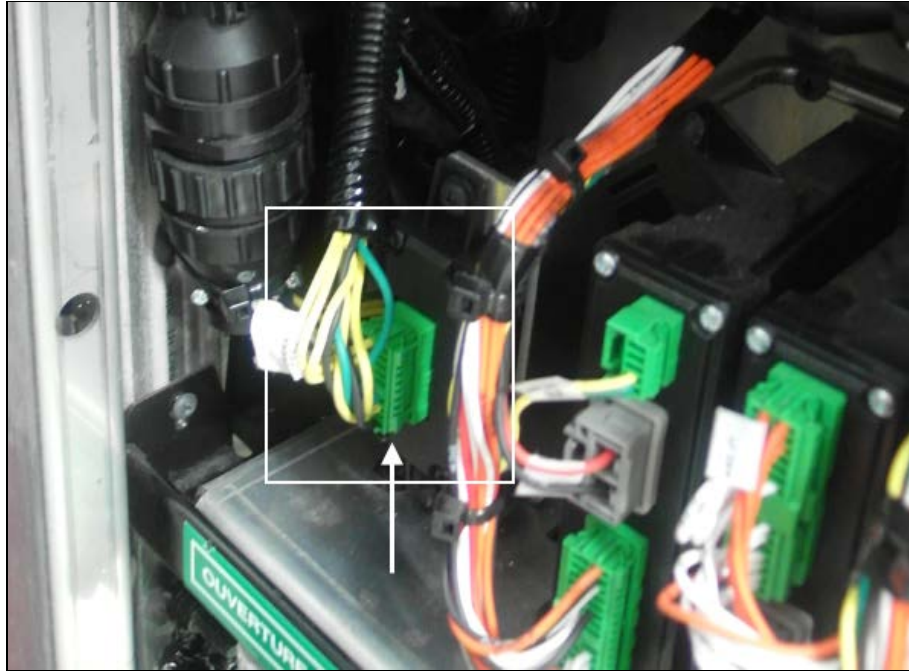
GUTTER PANEL; H3 VEHICLES ONLY

6. From under the dash, route the supplied harness (061890) so the gateway module connector (green) and the module power wires (black and yellow wires without connectors) can reach the front junction box area.



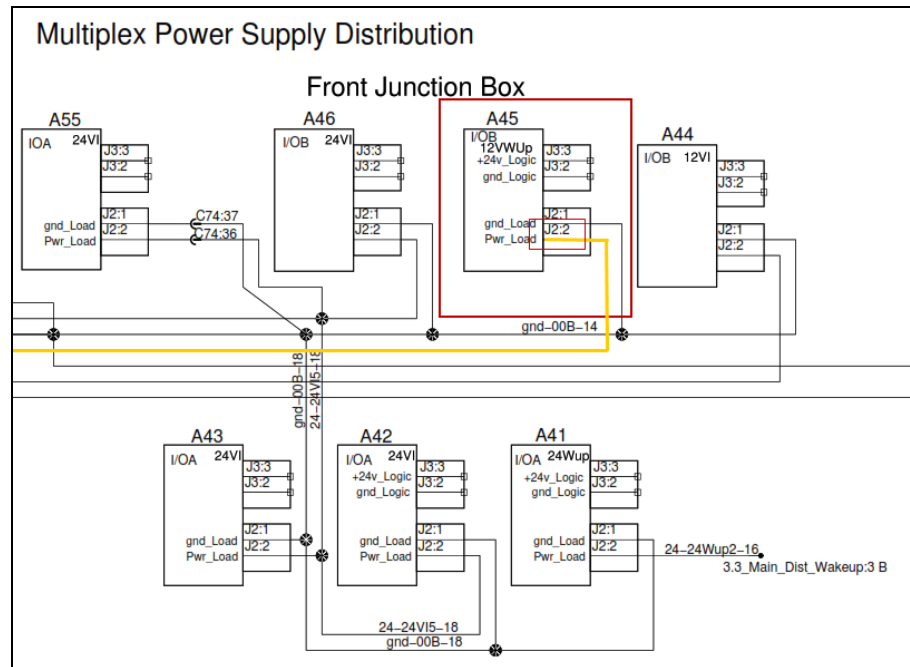
ELD HARNESS -MODULE CONNECTOR & POWER WIRES (H3 SHOWN)

7. Connect the green harness connector to the gateway module.



CONNECTED GATEWAY MODULE

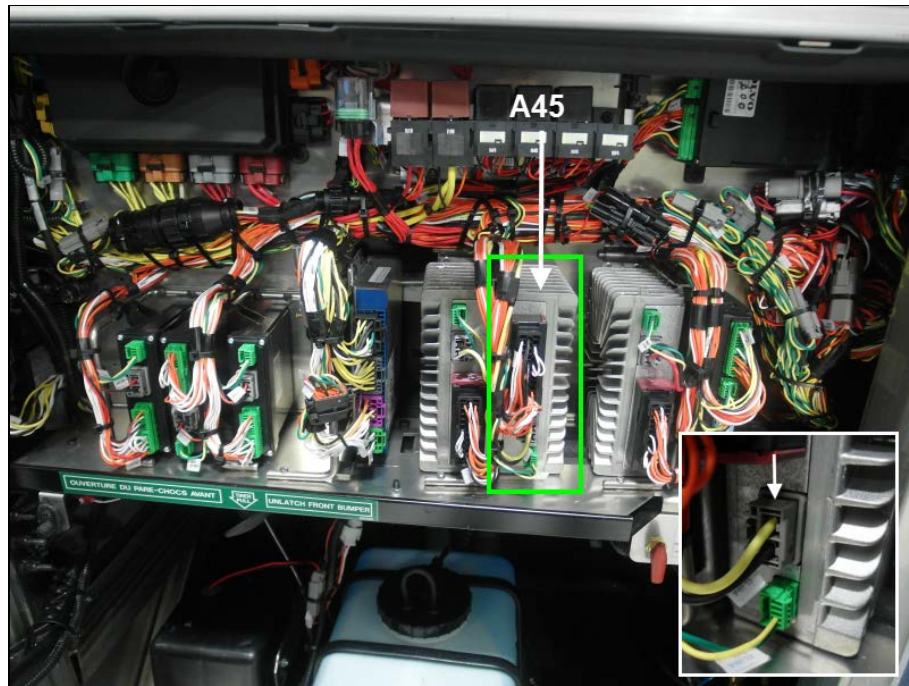
8. Connect the 12V supply wire (fused - yellow wire) to the J2:2 wire of the A45 module connector.



A45 MODULE & WAKE UP 12V POWER

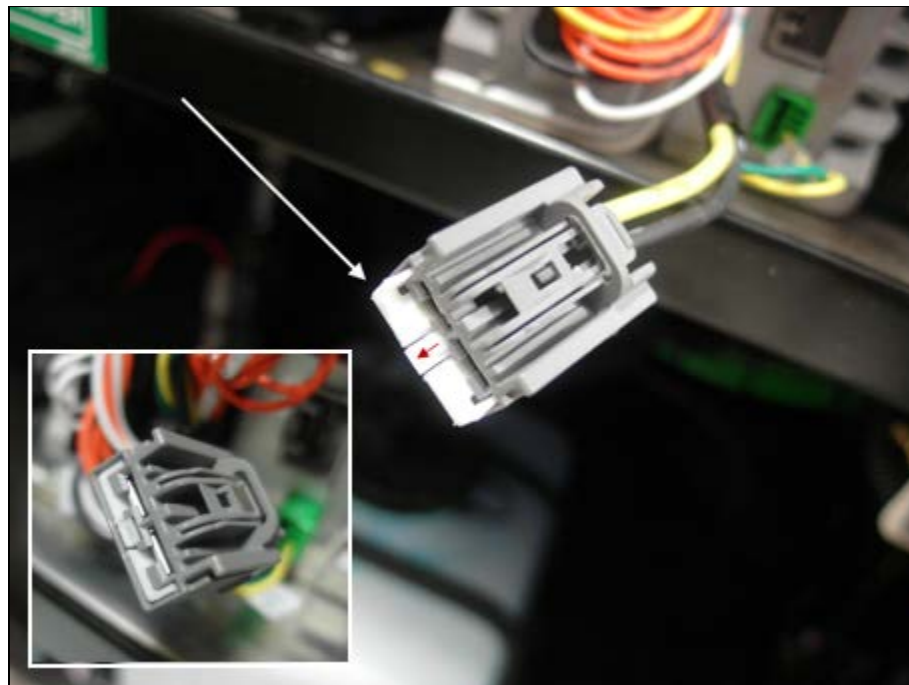
D061340 p 7.1

- Disconnect the A45 module power (12V wake-up) connector (grey plug with yellow & black wires).



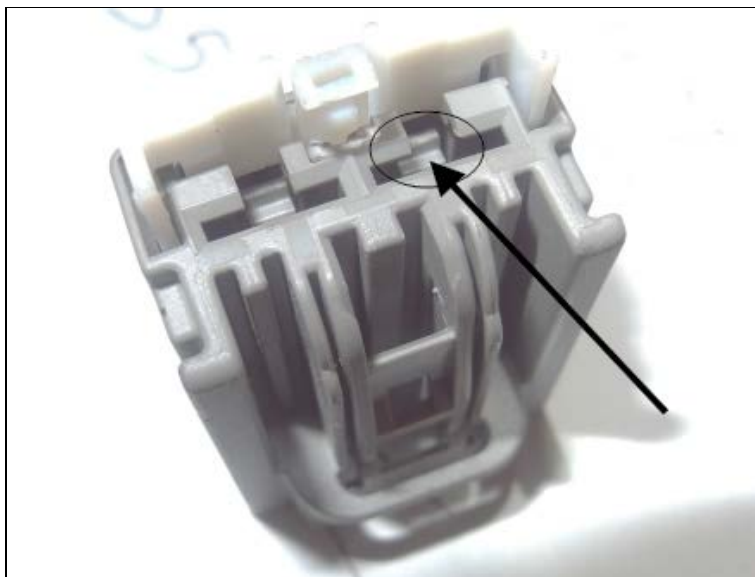
A45 MODULE AND GREY CONNECTOR (12V WAKE-UP)

- Lift the white locking bar located at the tip of the gray connector.



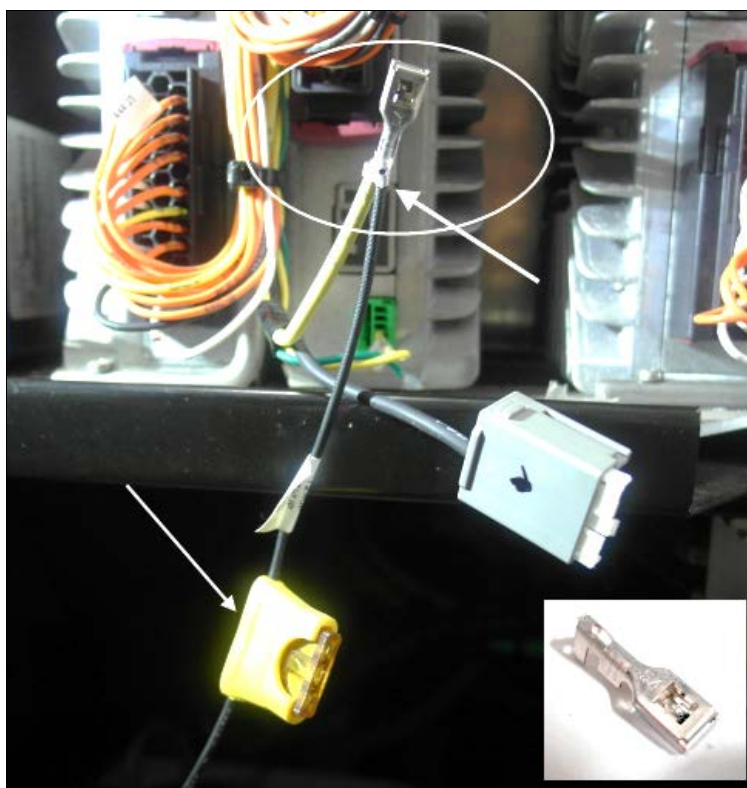
A45 MODULE CONNECTOR LOCKING BAR

- With a small flat screwdriver, press on the small tab located behind the locking bar to free the J2:2 yellow wire terminal.



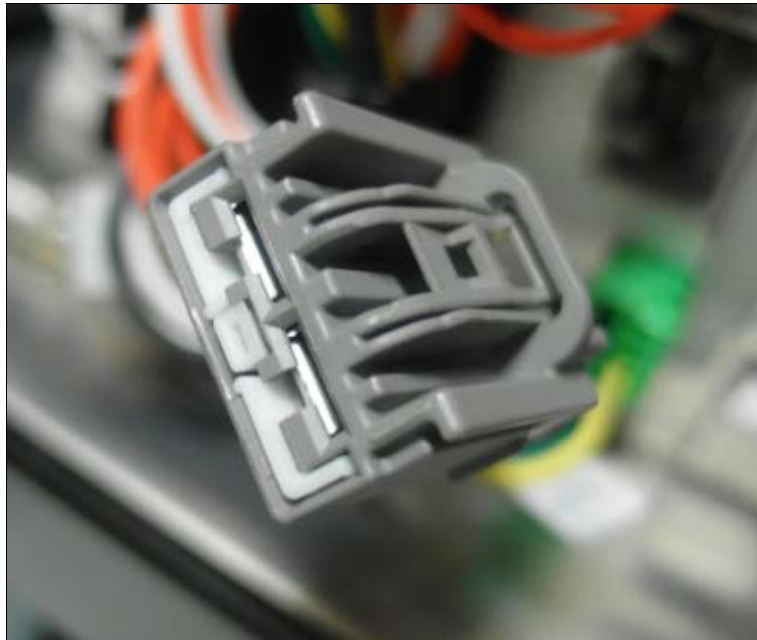
PRESS ON TAB TO FREE TERMINAL

- Cut the J2:2 yellow wire terminal (flush at terminal tail) & splice the end of the yellow wire & crimp the yellow wire and the ELD harness fused (yellow) wire together with the supplied (563160) terminal.



J2:2 WIRE & FUSED WIRE CRIMPED TOGETHER WITH TERMINAL

- Reinsert terminal in the grey A45 module connector and push back the white locking bar.



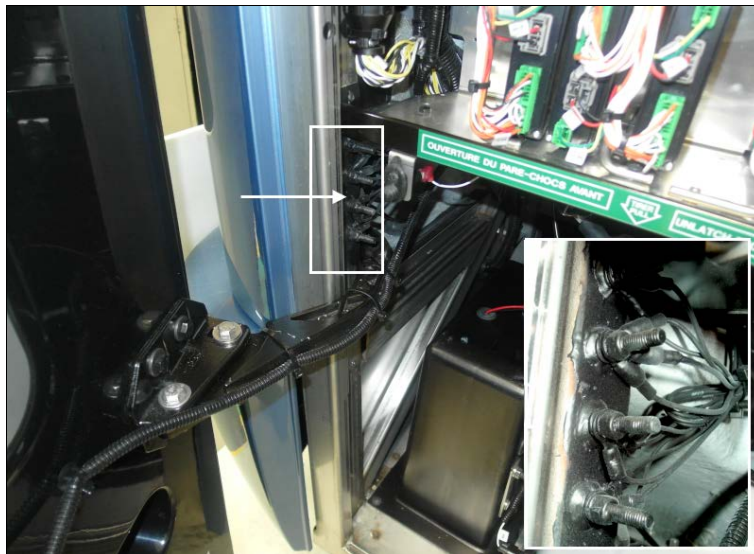
INSERT TERMINAL & LOCK

- Reconnect the A45 module.

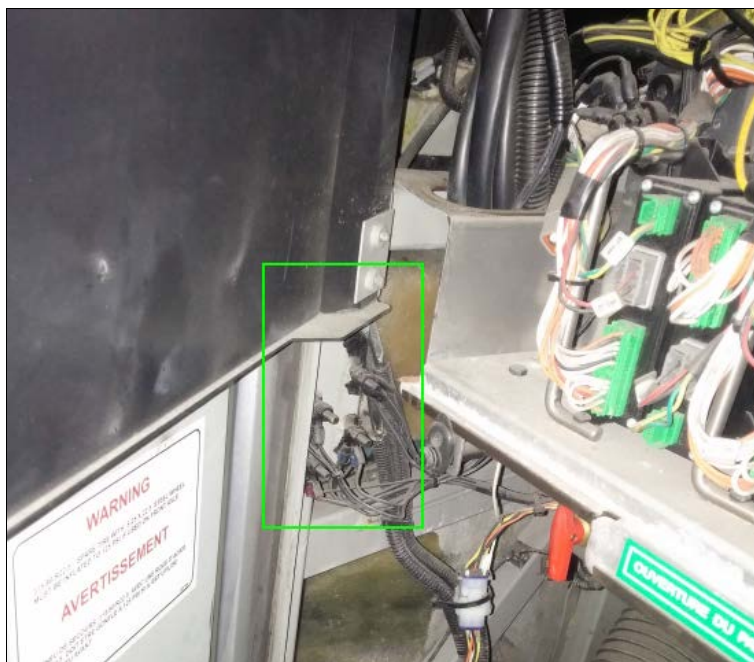


A45 MODULE & ELD GATEWAY MODULE CONNECTION

9. Connect the ground (black) wire to one of the ground stud provided in the electrical compartment.
 - Locate ground studs located on the frame; above the compartment door lower hinge for the H3 Vehicles and just below the junction box floor for the X3 Vehicles.



GROUND STUDS LOCATION IN FRONT COMPARTMENT (H3 VEHICLES)



GROUND STUDS LOCATION IN FRONT COMPARTMENT (X3 VEHICLES)

- Clean one of the ground studs (remove black rubber guard protector).

- Crimp the supplied round terminal (**560587**) to the ELD harness black ground wire (cut/adjust length of the wire before crimping).



ROUND TERMINAL ON GROUND WIRE

- Connect the black wire to the chosen ground stud (re-apply rubber guard protector).



GROUND WIRE CONNECTED

10. Secure the harness in several places inside the front junction box using some of the supplied cable ties (**504637**). Harness should follow closely original harness in the front junction box and not hang or rub against components (pay close attention to contact between harness and upper door hinge).



CHECK FOR CONTACT BETWEEN HINGE AND HARNESS (H3 SHOWN)

11. Reinstall the gutter panel on H3 vehicles. Check for interferences/contact between the ELD harness and the panel.



AVOID CONTACT HERE ON H3 VEHICLES

12. Put back/close the junction box protective panel (make sure the panel does not interfere with the gateway module wires and connector).



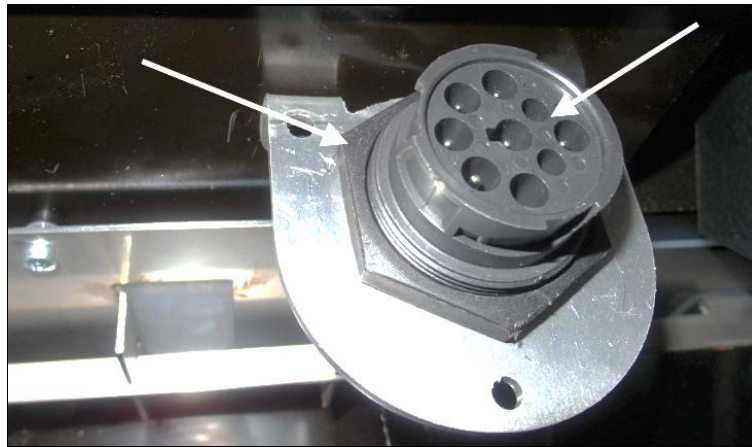
CHECK FOR INTREFFERENCE - INSIDE PANEL & MODULE HARNESS

13. Inside the vehicle, install the ELD connector support bracket (**380120**) under the dashboard (left side close to the steering column) using the remaining #10 screws.



BRACKET POSITION UNDER DASH

14. Secure the ELD connector to the bracket using the provided plastic panel nut (**566004**) and washer (**566006**).



ELD CONNECTOR & BRACKET

15. Remove the two screws holding the OBD connector to the dash.



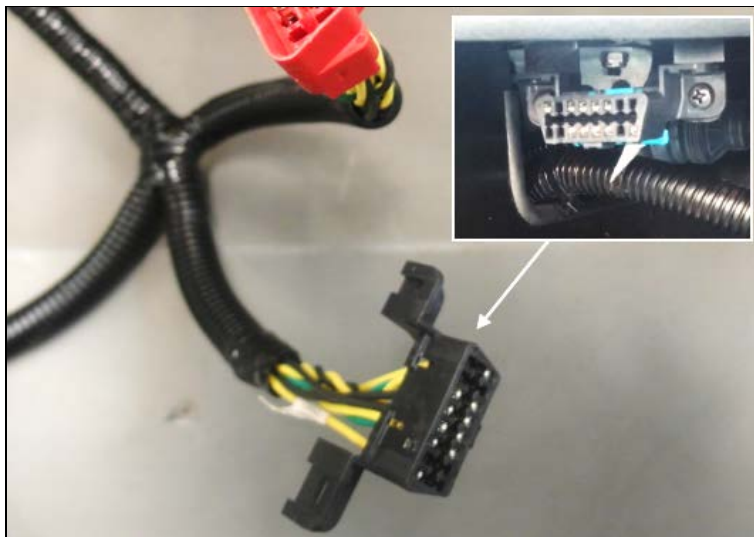
OBD CONNECTOR SCREWS

16. Connect the ELD harness OBD (red) connector to the vehicle OBD connector previously unscrewed from the dash.



RED HARNESS CONNECTOR – TO VEHICLE OBD CONNECTOR

17. Secure the ELD harness OBD connector (black) where the original vehicle OBD connector was screwed to the dash. This connector will now be used for OBD diagnostic procedure.



ELD HARNESS OBD CONNECTOR – SECURE UNDER DASH

18. Pass the vehicle OBD connector and ELD harness red connector through the opening leading to the front junction box to put both connectors out of the way.



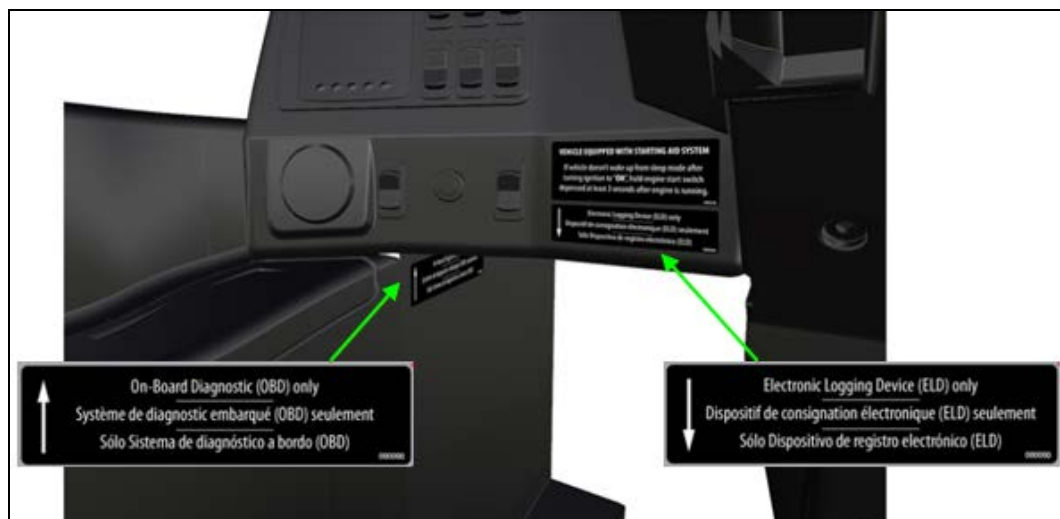
OPENING UNDER DASH AREA

19. Secure the ELD harness under the dash with the remaining cable ties so no part of it is hanging.



SECURE HARNESS UNDER DASH

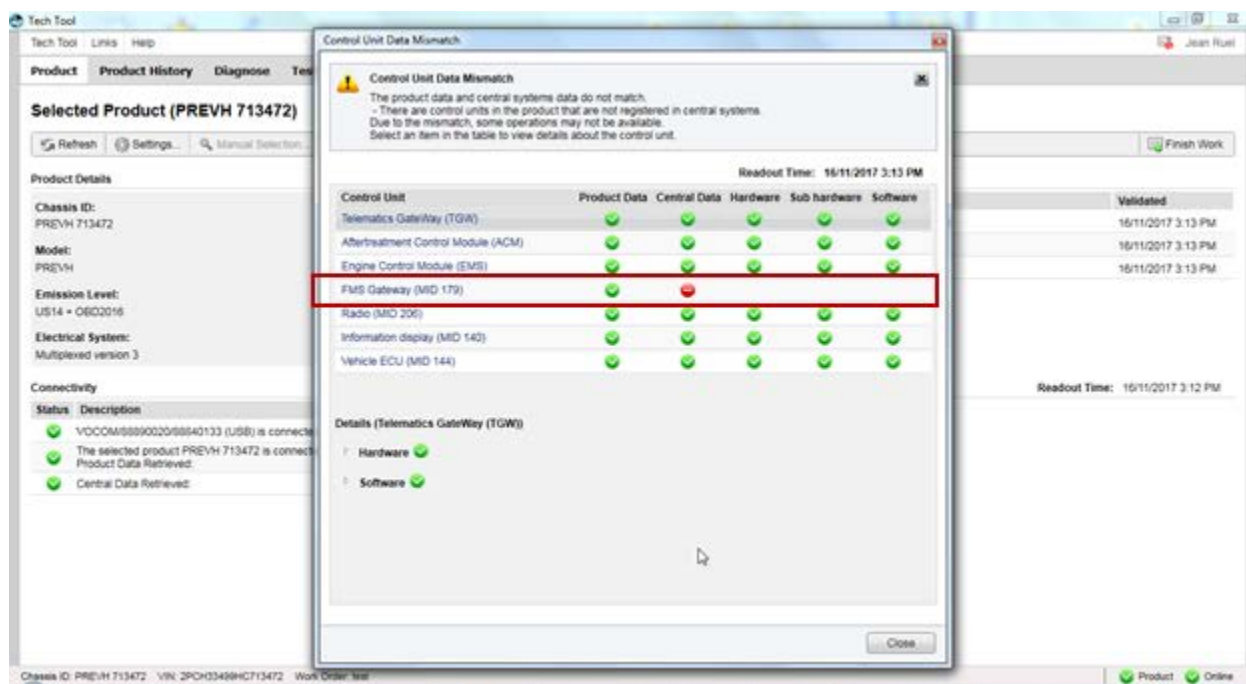
20. Apply ELD decal (**390038**) on the dash just over the ELD connection and apply the OBD decal (**390039**) on the left molding, close to the OBD connector to finish the module and harness installation.



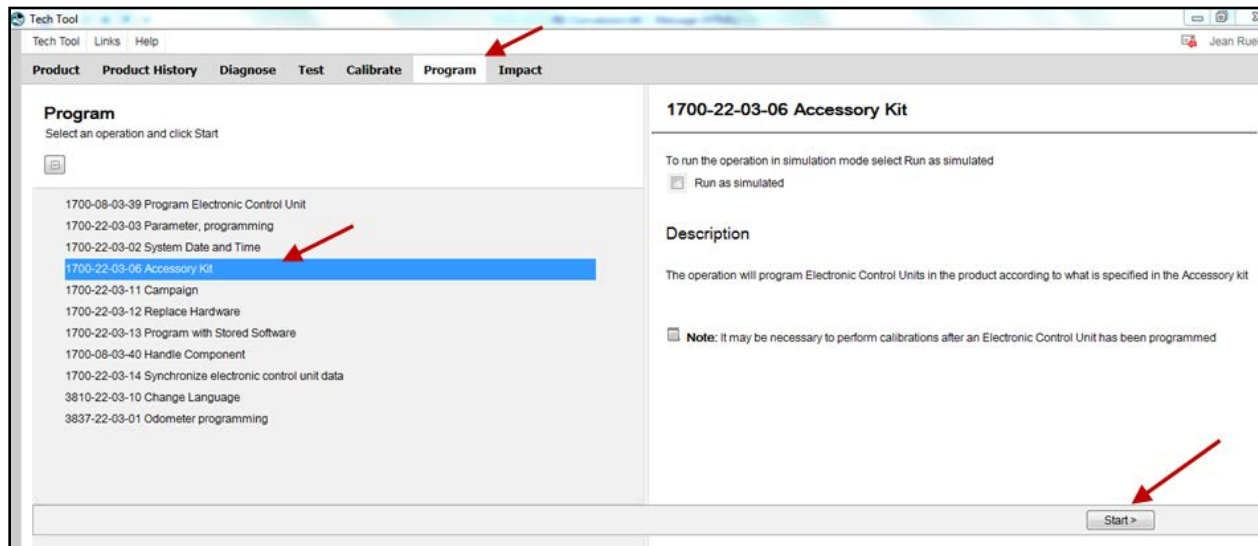
OBD & ELD DECALS

PART 2: FMS GATEWAY MODULE PROGRAMMING

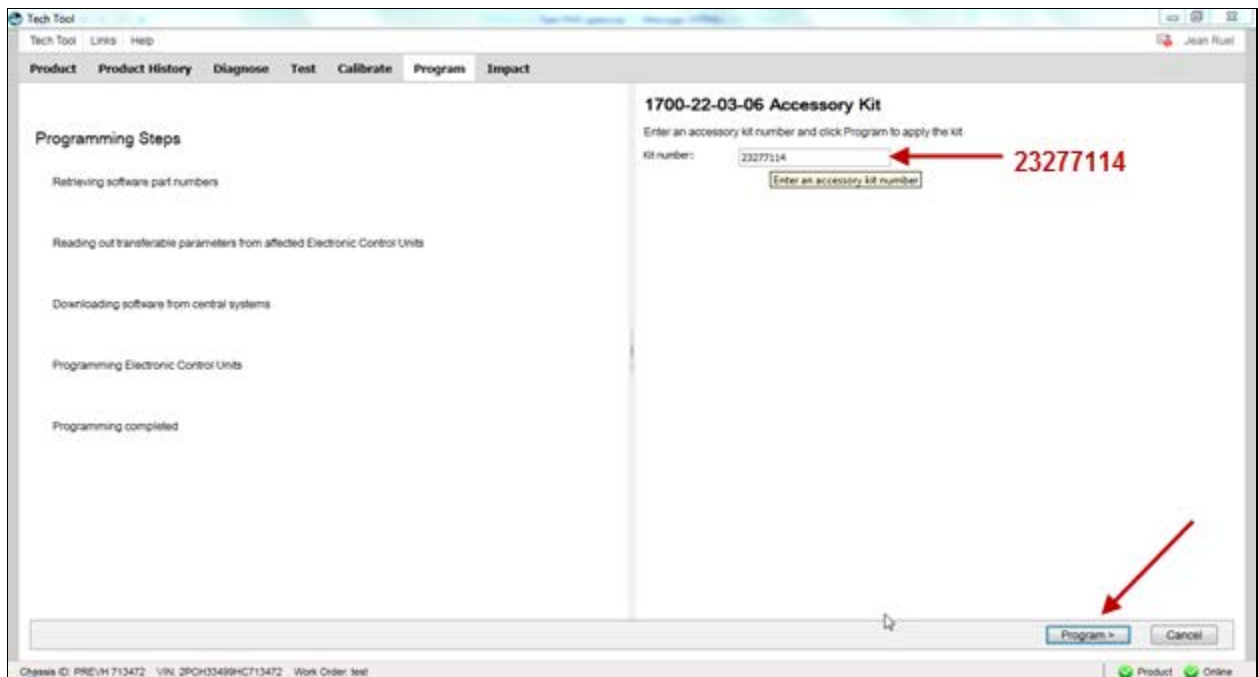
1. Connect to PTT (Premium Tech Tool) and confirm in the product tab that the FMS gateway (MID 179) is present in the Product Data but not in the Central Data.



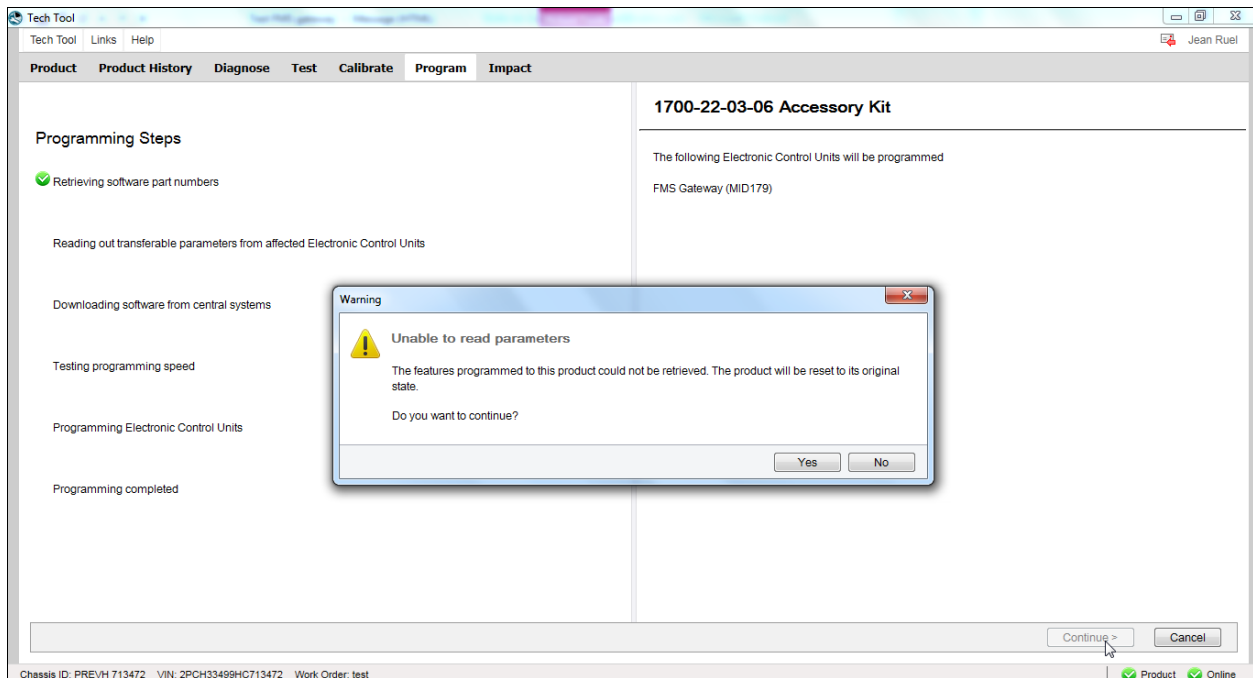
2. In Premium TechTool, select PROGRAM tab. In PROGRAM tab, select operation 1700-22-03-06 Accessory Kit then clicks START.



3. Enter Accessory kit number **23277114** Click on PROGRAM button below and then follow the instructions. The programming process will start.



4. Click YES on the following message.

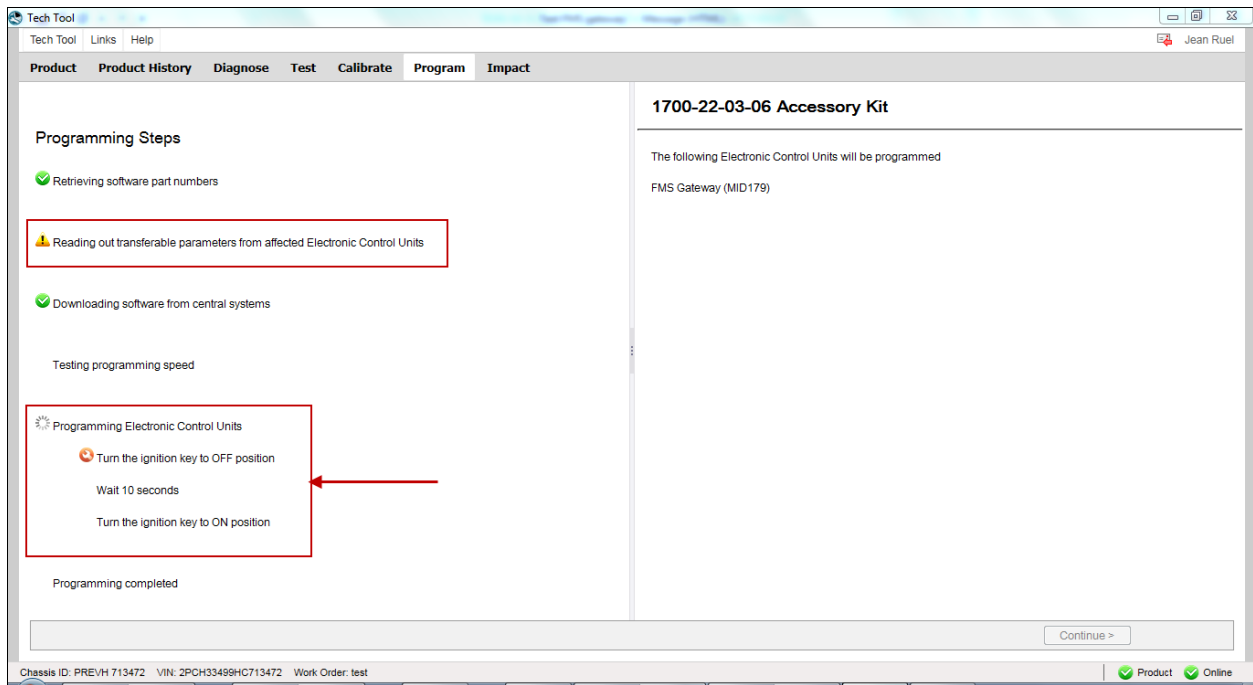


5. When prompted, proceed with the following actions:

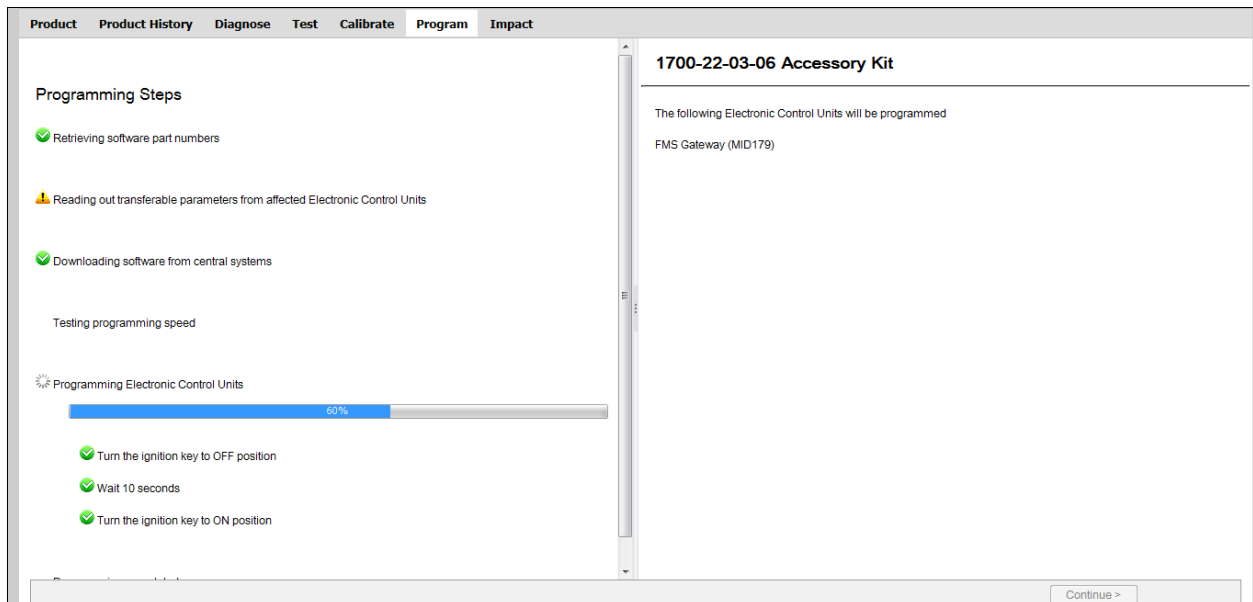
- Turn the ignition key to the OFF position.
- Wait 10 seconds.
- Turn the ignition key to the ON position.

NOTE

Second programming step "Reading out transferable parameters from affected Electronic Control Units" will show as incomplete with this symbol ; This is normal with a new module installation.



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



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

Control Unit Information
Select an item in the table to view details about the control unit.

Readout Time: 16/11/2017 3:29 PM

Control Unit	Product Data	Central Data	Hardware	Sub hardware	Software
Telematics GateWay (TGW)	✓	✓	✓	✓	✓
Aftertreatment Control Module (ACM)	✓	✓	✓	✓	✓
Engine Control Module (EMS)	✓	✓	✓	✓	✓
Radio (MID 206)	✓	✓	✓	✓	✓
Information display (MID 140)	✓	✓	✓	✓	✓
Vehicle ECU (MID 144)	✓	✓	✓	✓	✓
FMS Gateway (MID 179)	✓	✓	✓	✓	✓

Details (FMS Gateway (MID 179))

Part Number	Product Data	Central Data
MSW FMS Gateway	23155913	23155913
DS1 FMS Gateway	23155914	23155914
DS2 FMS Gateway	23155915	23155915

Chassis ID: PREVH 713472 VIN: 2PCH33496HC713472 Work Order: test

PARTS / WASTE DISPOSAL

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