

# PREVOST

## Instruction Sheet

## IS-17905A

### ELD interface kit for Pre-OBD Prevost Vehicles Using Volvo D13 Engines

Revision A Connection to A45 module – simplified procedure

03-15-2019

#### APPLICATION

Model	VIN
H3 Series Vehicles Model Year : 2008 to 2013	From 2PCH33493 <u>8</u> C71 <u>1202</u> up to 2PCH33497 <u>D</u> C71 <u>2363</u>
X3 Series Vehicles Model Year : 2008 to 2013	From 2PCG3349X <u>8</u> C72 <u>9451</u> up to 2PCY3349X <u>D</u> C73 <u>5457</u>

#### MATERIAL

Kit #**069799** includes the following parts:

Part No.	Description	Qty
061889	ELD Harness D13 Pre-OBD (9 pin)	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
560587	Ground terminal – Round (16-14) 1/4"	1
FI-17905	Instruction Sheet (FR)	1
IS-17905	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.

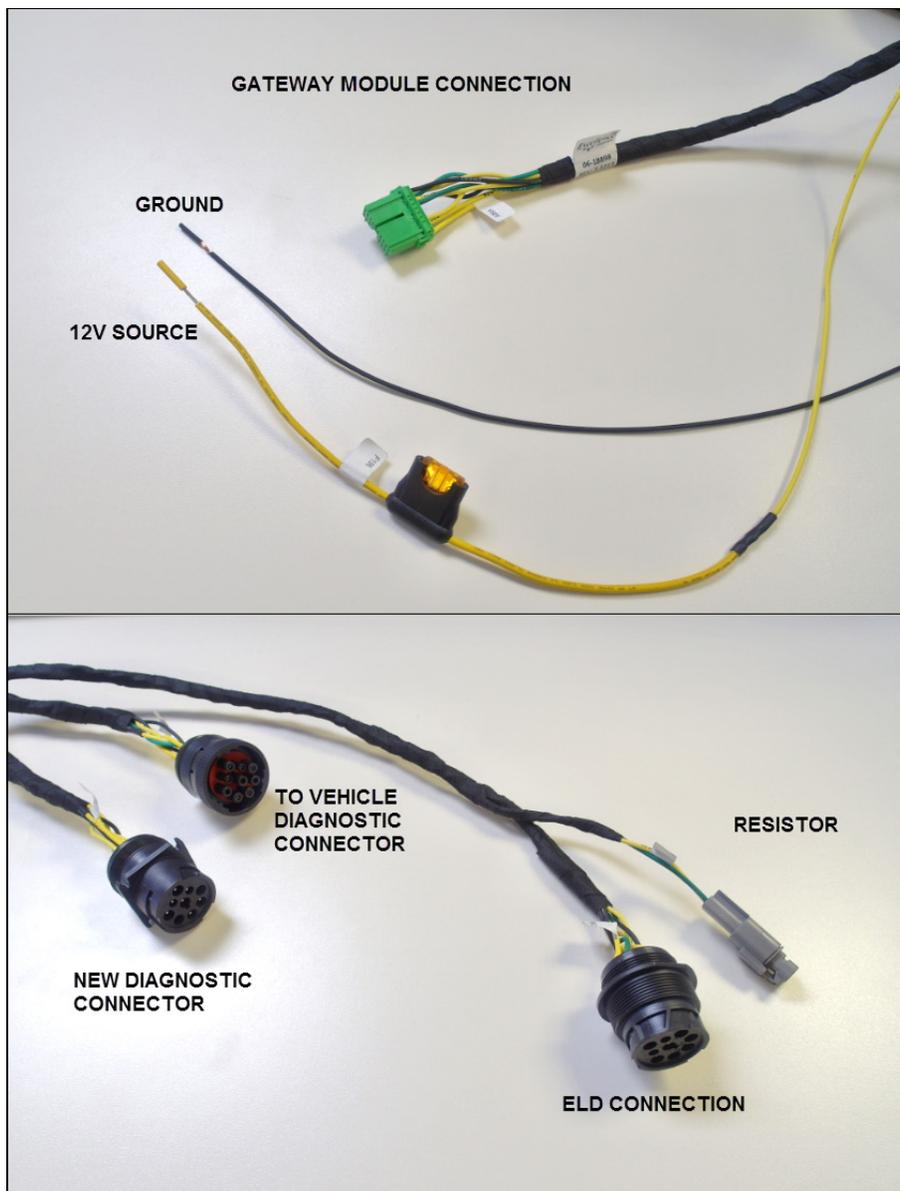
**PROCEDURE**



**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**



061889 - 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.



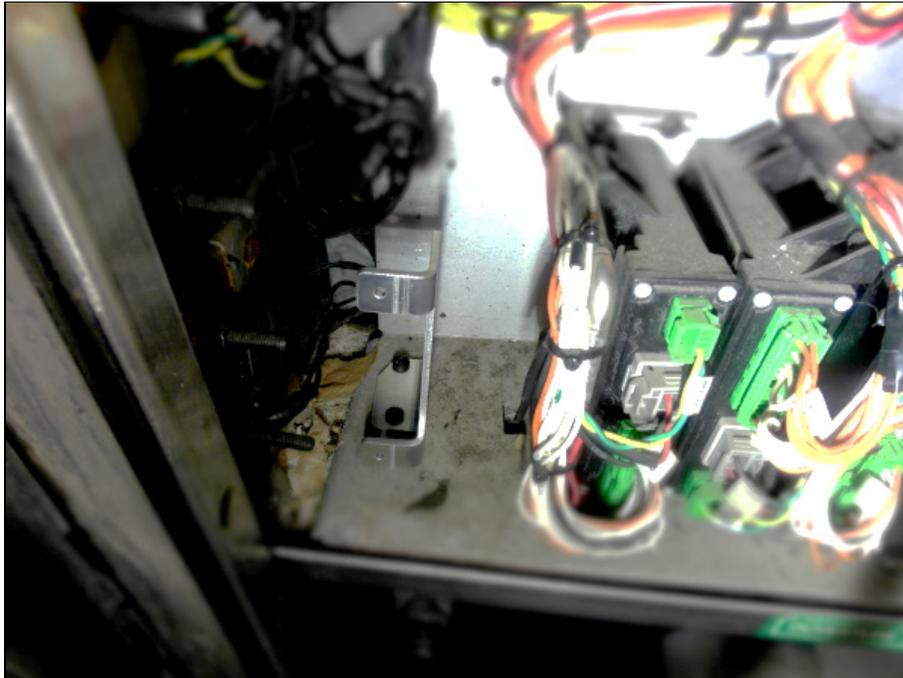
MODULE POSITION IN FRONT JUNCTION BOX (H3 SHOWN, X3 SIMILAR LOCATION)

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**

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 hole positions with a sharpie and drill the two screw holes using an angle drill and a 9/64" (3mm) drill bit.
- Secure the bracket to the junction box floor using two of the supplied #10 screws (**502868**).



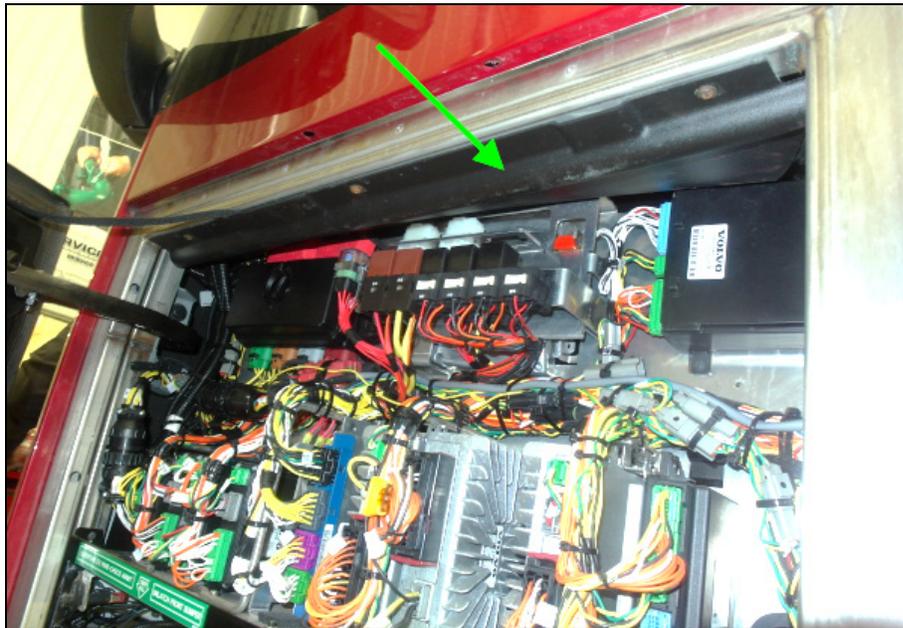
**BRACKET POSITION**

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



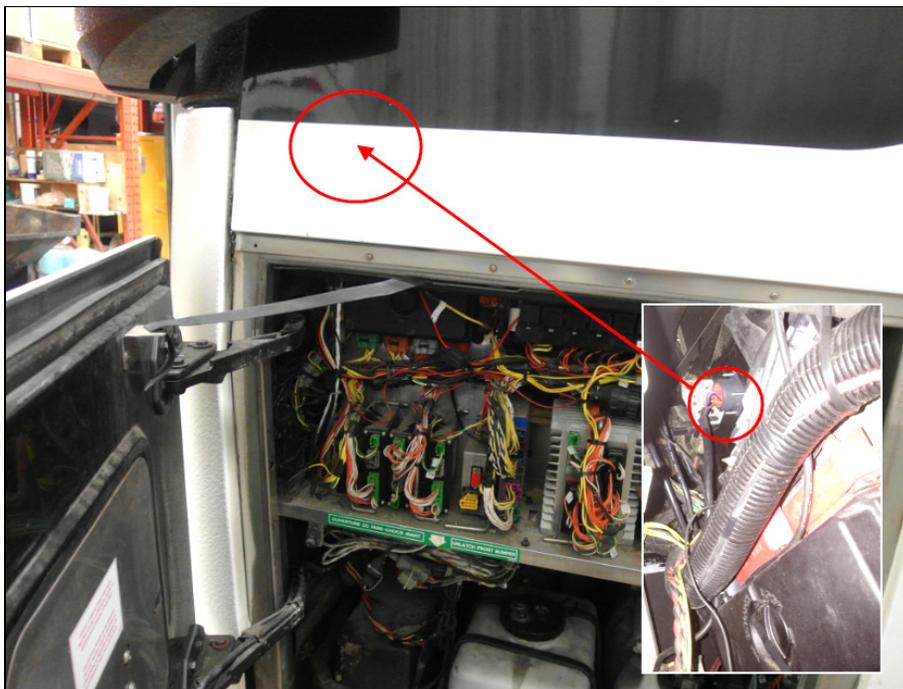
**GATEWAY MODULE ON BRACKET – USE FLAT WASHERS**

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. In the upper left corner of the front electrical compartment, locate the backside of the vehicle diagnostic connector. On X3 vehicles, the connector is easily accessible just below the side window. On H3 vehicle the connector is hidden under the vehicle body panel (above the fuse box, gutter panel must be removed).

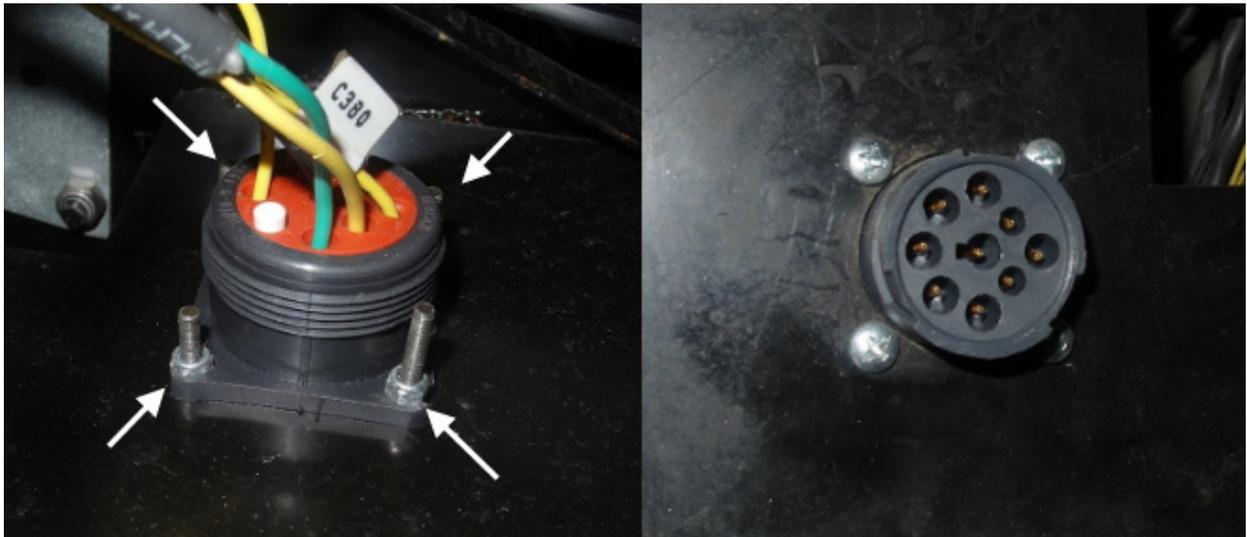


**DIAGNOSTIC CONNECTOR POSITION (H3 VEHICLES)**



DIAGNOSTIC CONNECTOR POSITION (X3 VEHICLES)

7. Unscrew the connector from the vehicle lateral panel and remove from the opening. On H3 vehicles, the help of an assistant will be necessary to hold the screws in the driver area.



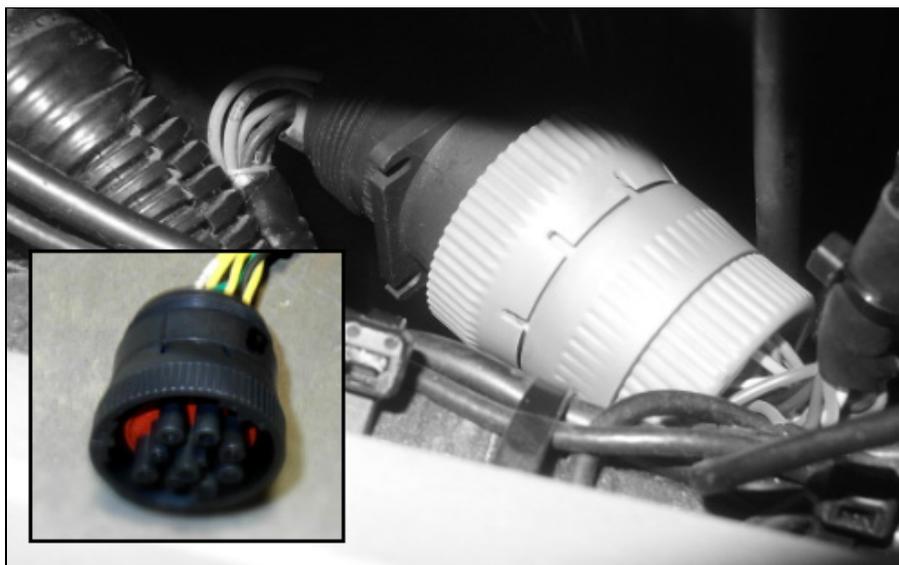
DIAGNOSTIC CONNECTOR SCREWS; BOTH SIDES

- Secure the ELD harness (061889) diagnostic connector (9 pin, square mounting plate with 4 holes) in the opening where the original vehicle diagnostic connector was (lateral panel). This connector will now be used for diagnostic procedure.



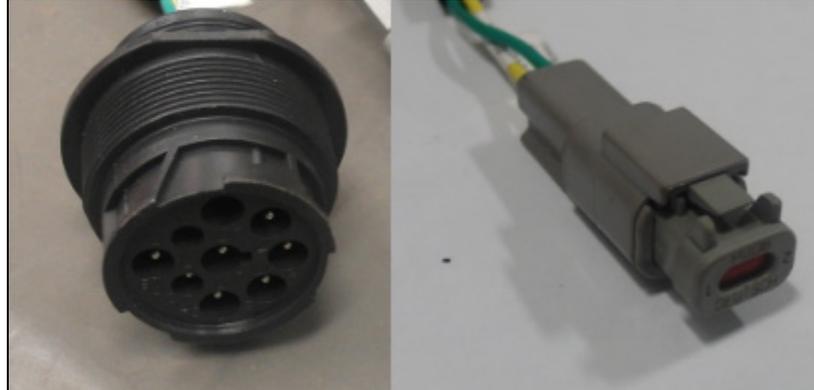
ELD HARNESS DIAGNOSTIC CONNECTOR OPENING

- Connect the ELD harness lockable (with lock ring) 9 pin connector to the original vehicle diagnostic connector (connector previously removed from opening). Secure this part of the harness with supplied cable ties (504637) so no parts are hanging.



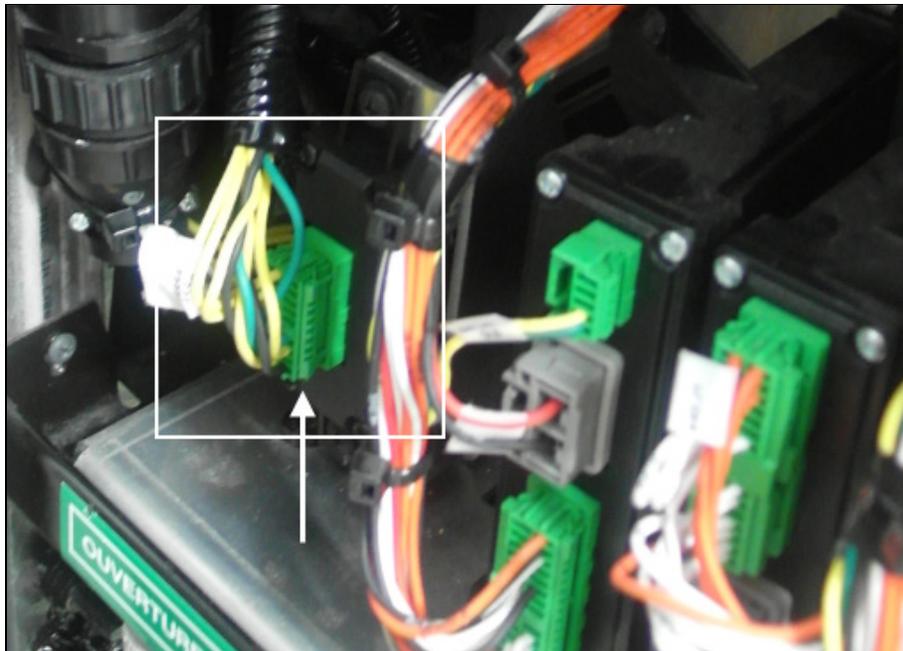
LOCK RING CONNECTOR: CONNECT TO ORIGINAL DIAGNOSTIC CONNECTOR

10. Route the last ELD 9 pin connector and the resistor part of the harness inside the vehicle (under dash area).



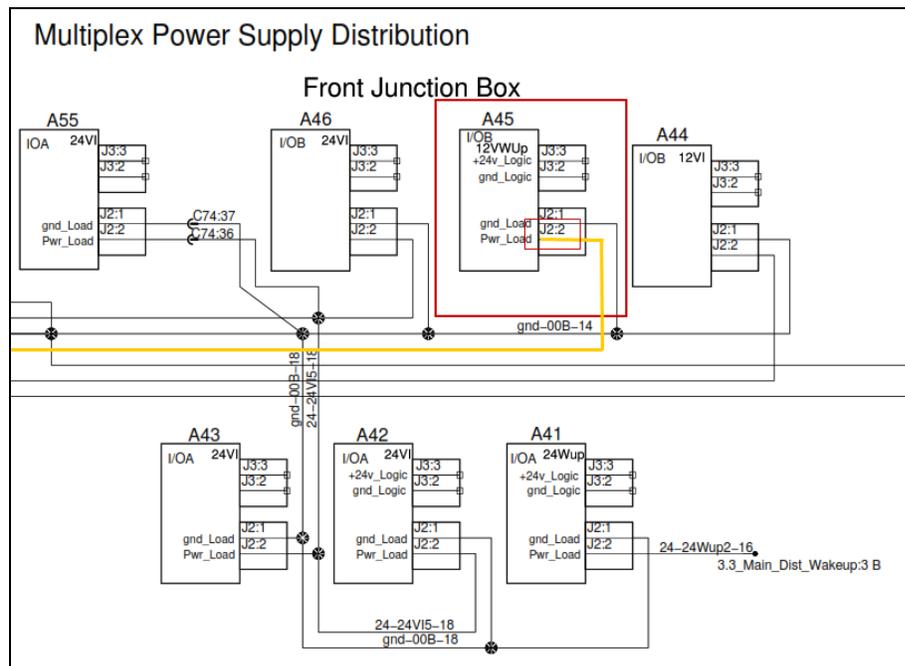
PASS INSIDE VEHICLE – UNDERDASH AREA

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



CONNECTED GATEWAY MODULE

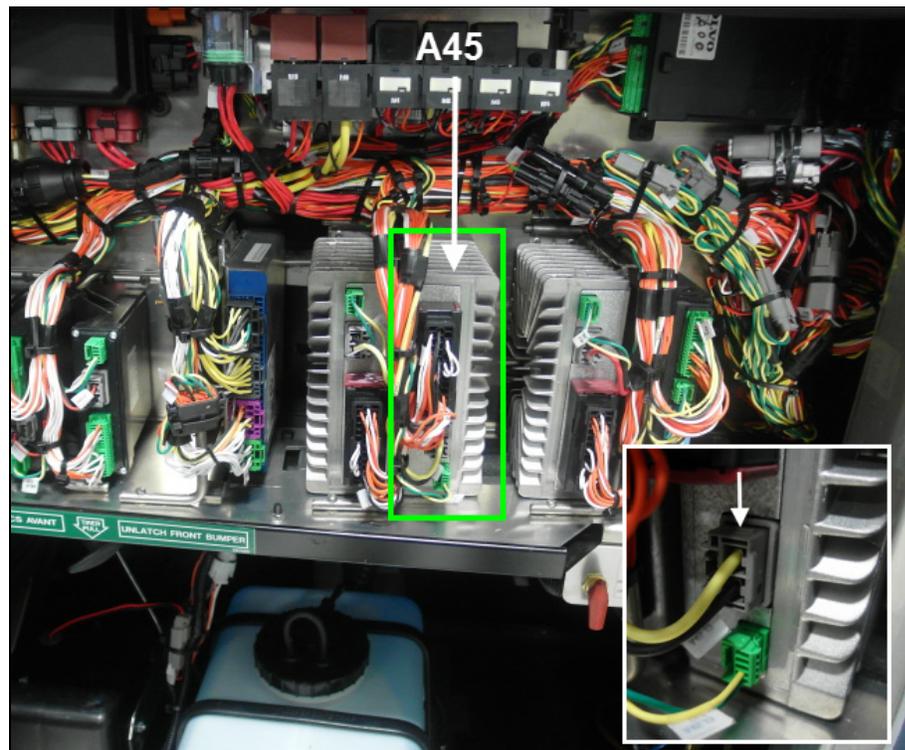
12. Connect the 12V supply wire (fused - yellow wire) to the J2:2 wire of the A45 module connector.



A45 MODULE & WAKE UP 12V POWER

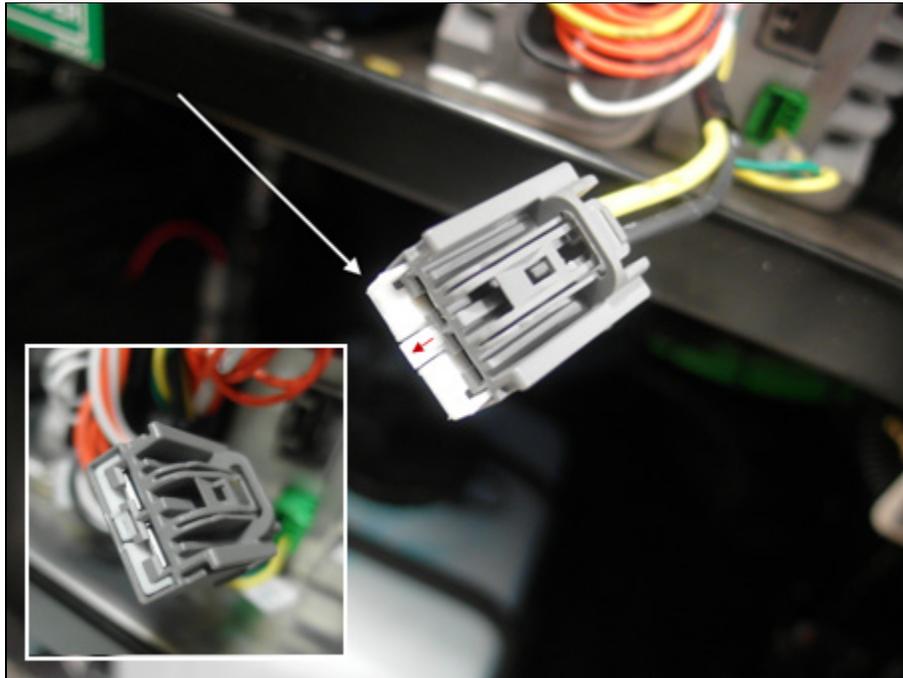
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- Disconnect the A45 module power (12V wake-up) connector (grey plug with yellow & black wires).



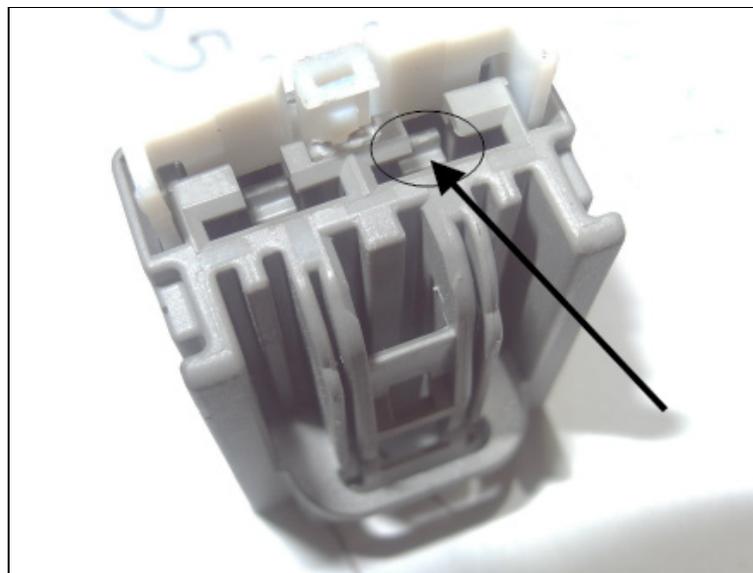
A45 MODULE AND GREY CONNECTOR (12V WAKE-UP)

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



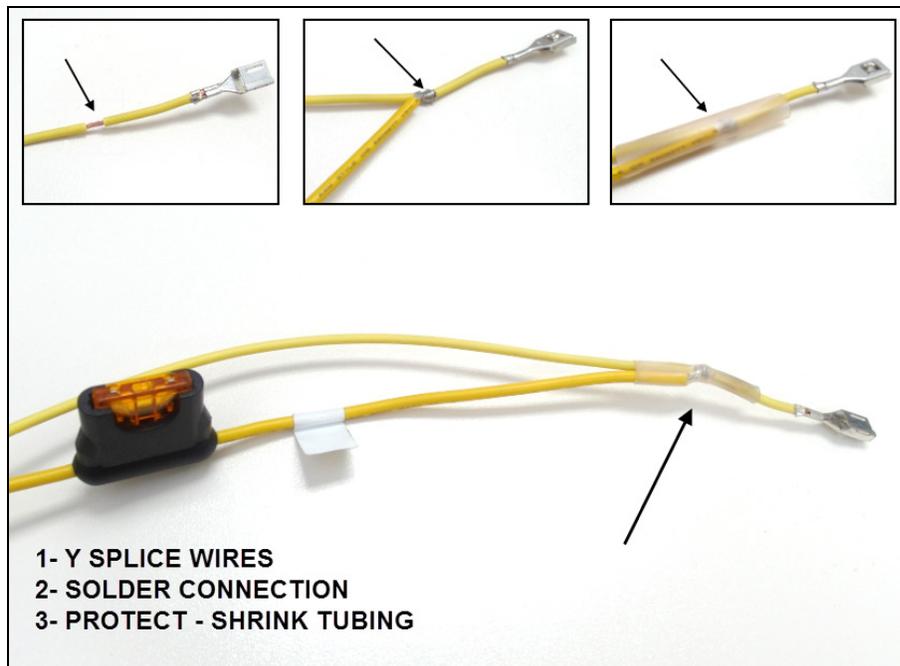
A45 MODULE CONNECTOR LOCKING BAR

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



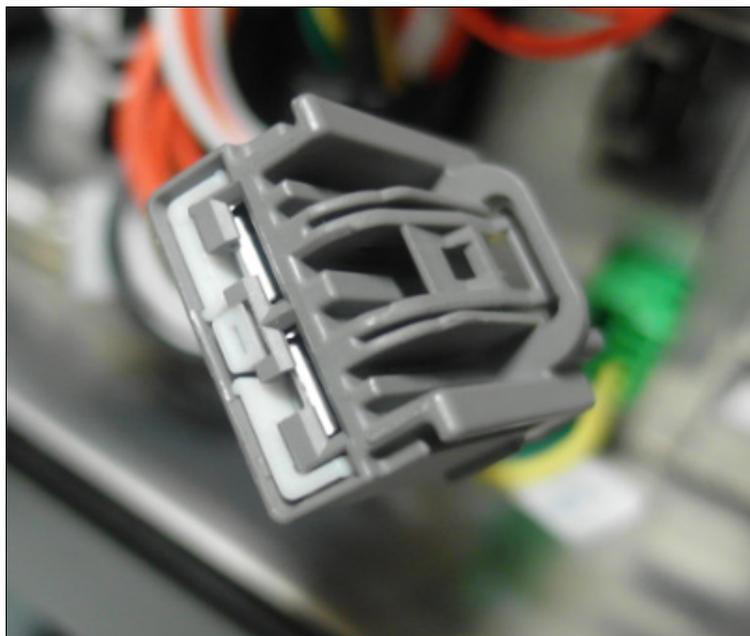
PRESS ON TAB TO FREE TERMINAL

- Cut a small section of the J2:2 yellow wire insulator +/- one inch below the terminal and splice it (Y-splice) with the ELD harness fused wire end. Solder the connection and add some heat shrink tubing to protect the connection.



J2:2 WIRE & ELD FUSED WIRE JOINTED TOGETHER

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



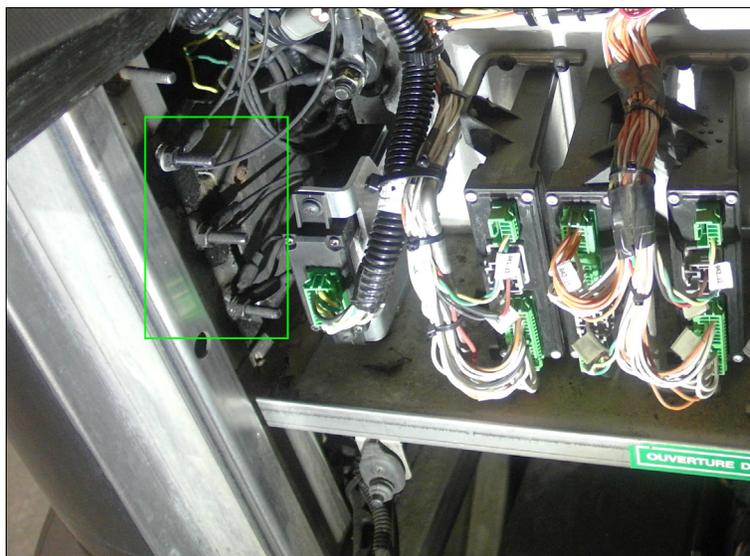
INSERT TERMINAL & LOCK

- Reconnect the A45 module.



**A45 MODULE & ELD GATEWAY MODULE CONNECTION**

13. Connect the ground (black) wire to one of the ground stud provided in the electrical compartment.
  - Locate ground studs located on the frame, next to the newly installed gateway module (H3 Vehicles) or just below the junction box floor (X3 Vehicles).

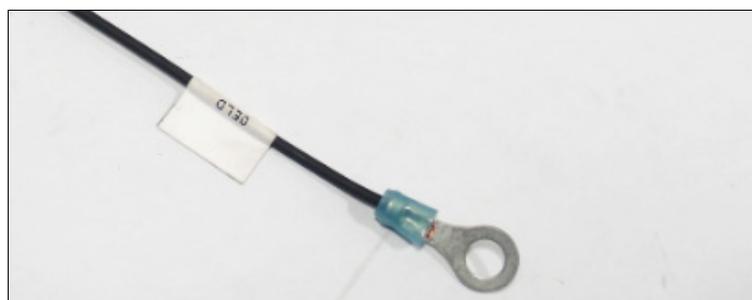


**GROUND STUDS LOCATION IN FRONT COMPARTMENT H3 VEHICLES**



**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**

14. 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).



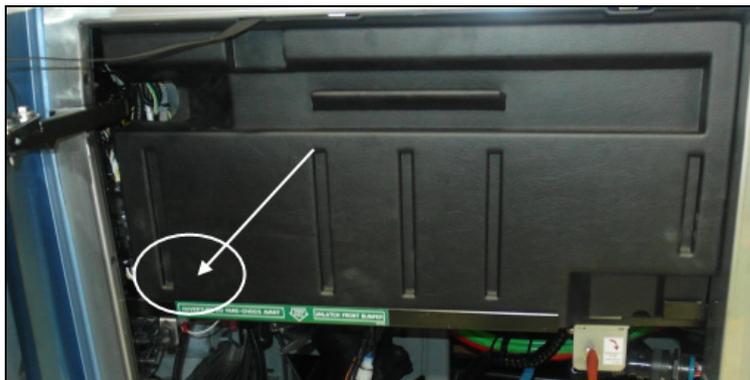
CHECK FOR CONTACT BETWEEN HINGE AND HARNESS (H3 SHOWN)

15. Reinstall the gutter panel (H3 vehicles). Check for interferences/contact between the ELD harness and the panel.



AVOID CONTACT HERE ON H3 VEHICLES

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



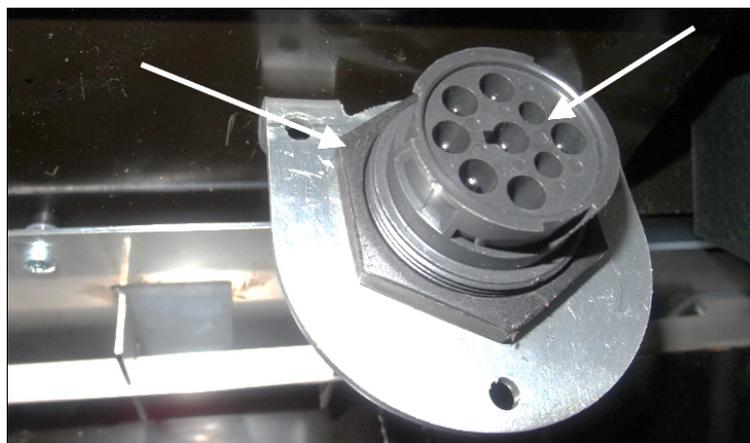
CHECK FOR INTREFERENCE – INSIDE PANEL & MODULE HARNESS

17. 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.



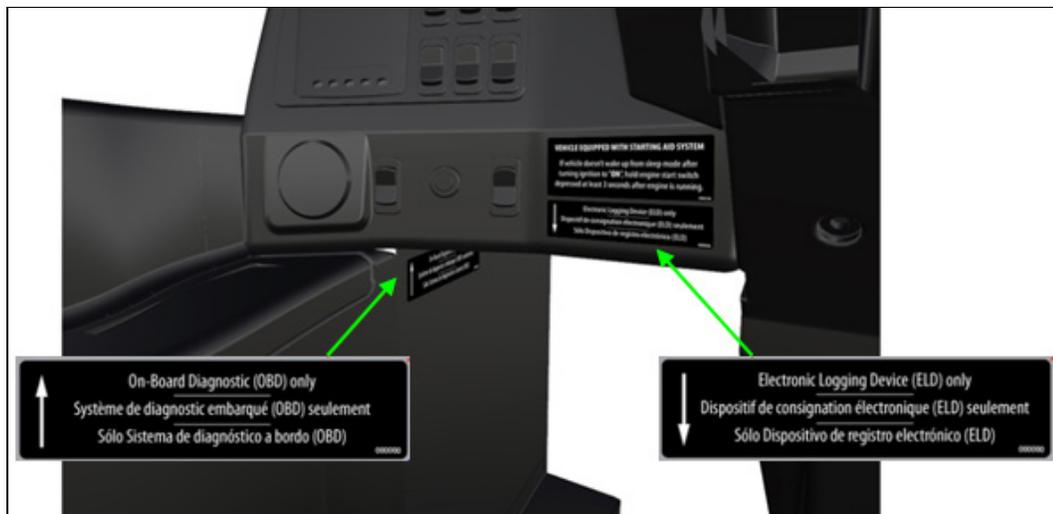
BRACKET POSITION UNDER DASH

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



ELD CONNECTOR & BRACKET

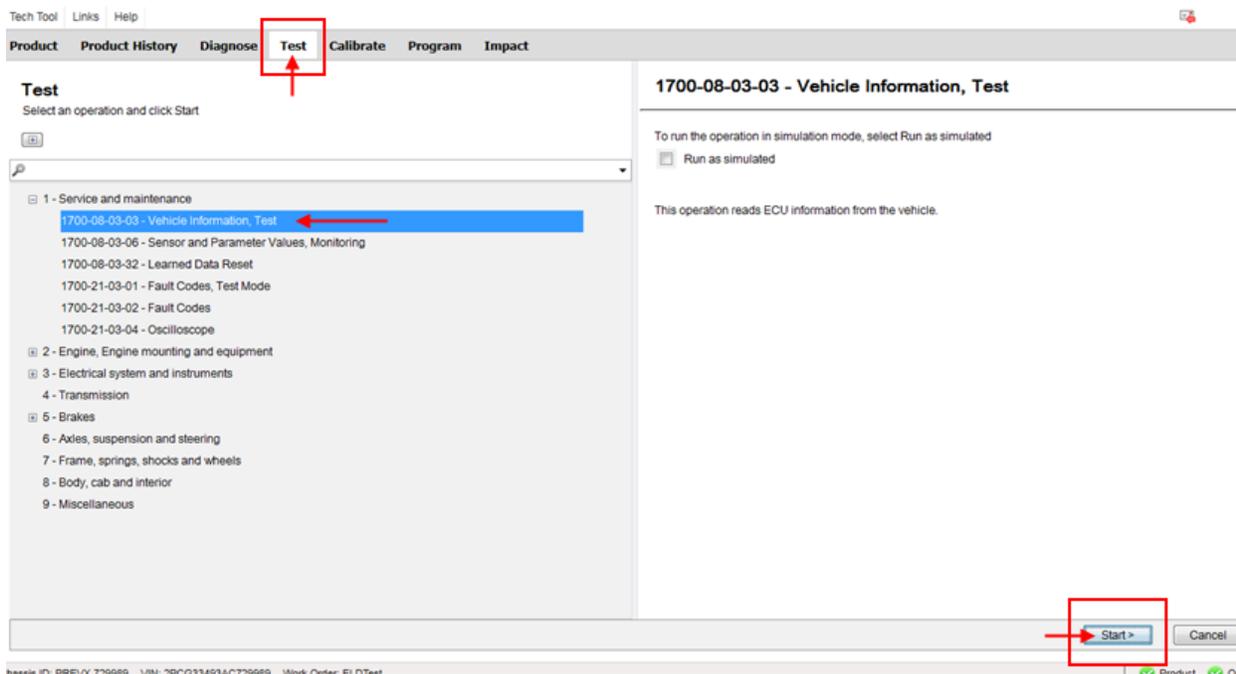
19. Apply ELD decal (**390038**) on the dash just over the ELD connection and apply the diagnostic decal (**390039**) on the left molding, close to the diagnostic connector to finish the module and harness installation.



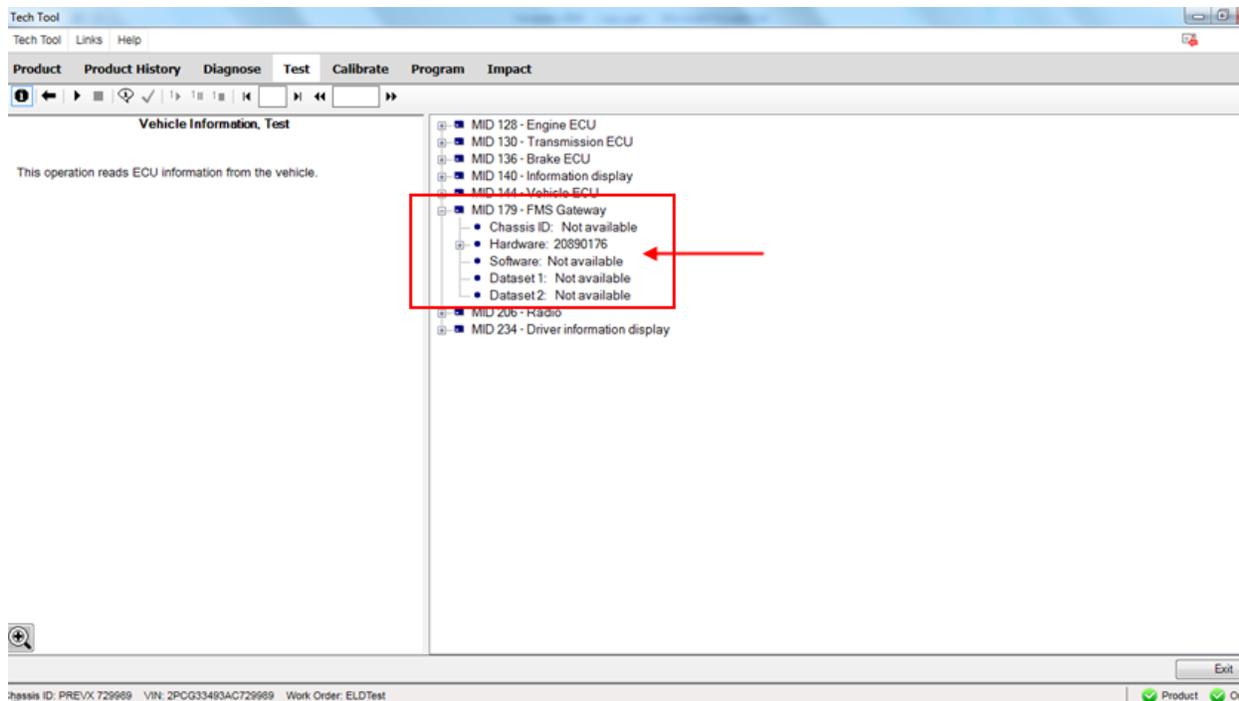
DIAGNOSTIC (OBD) & ELD DECALS

## PART 2: FMS GATEWAY MODULE PROGRAMMING

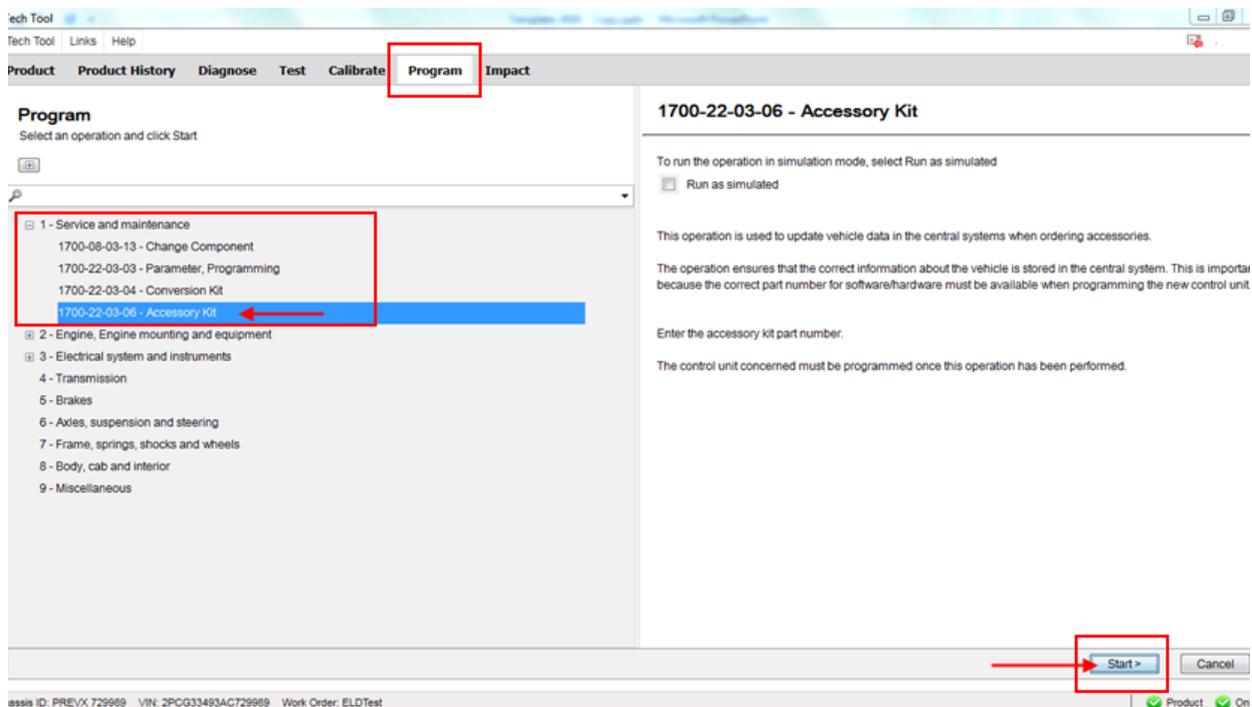
1. Connect to PTT (Premium Tech Tool) and select TEST. Expand operation *Service and Maintenance*, select *1700-08-03-03 Vehicle Information Test* and click START.



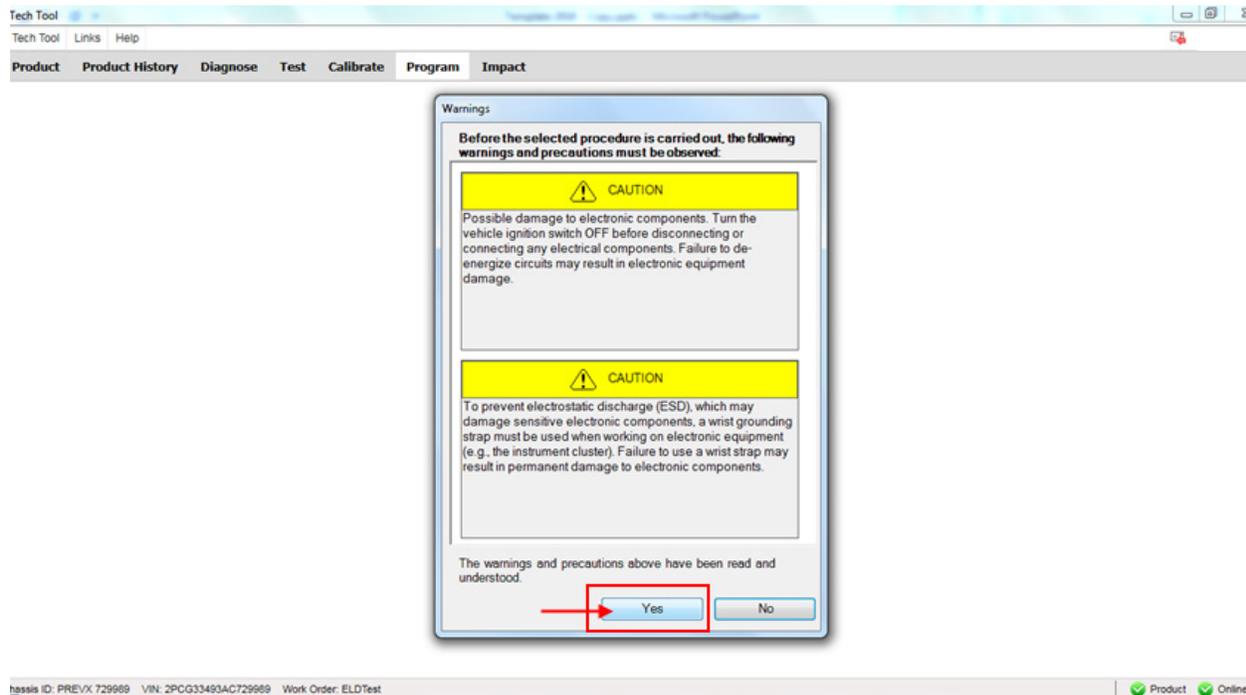
2. Confirm in Vehicle Information Test that MID 179 – FMS Gateway is present, but that related information's are not available.



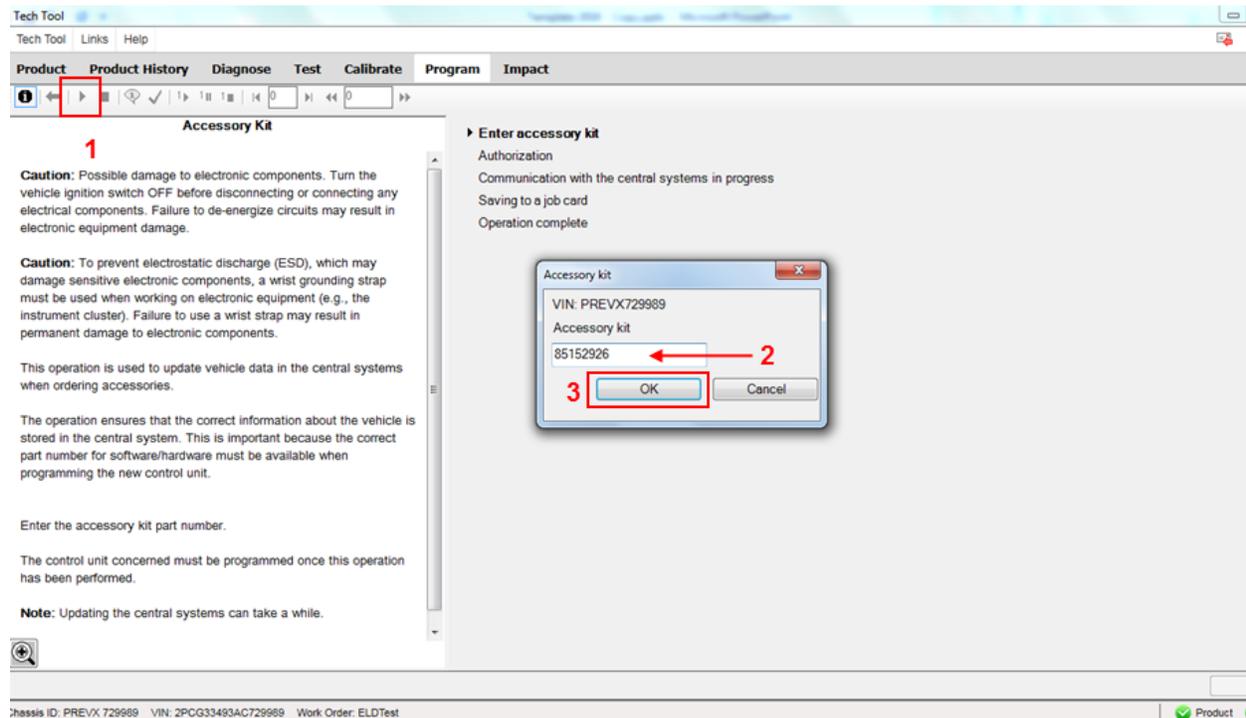
3. Exit the TEST menu and select PROGRAM. Expand operation *Service and Maintenance*, select *1700-22-03-06 Accessory Kit* and click START.



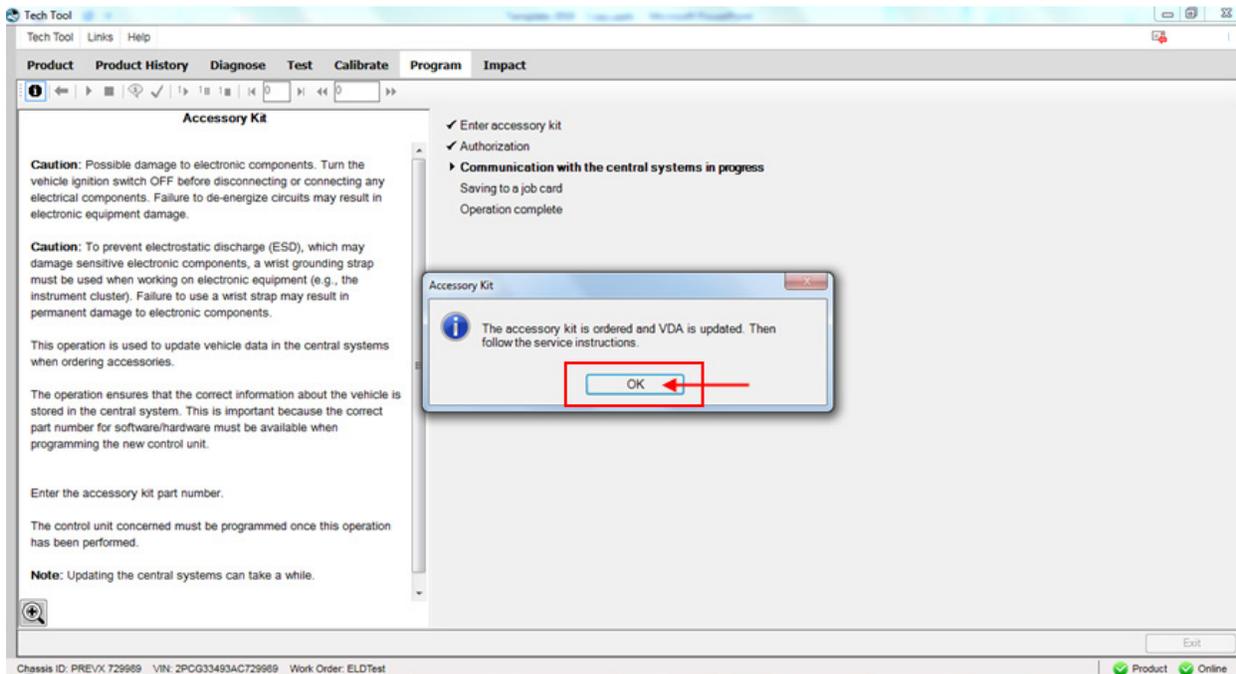
4. Click YES on the following message box.



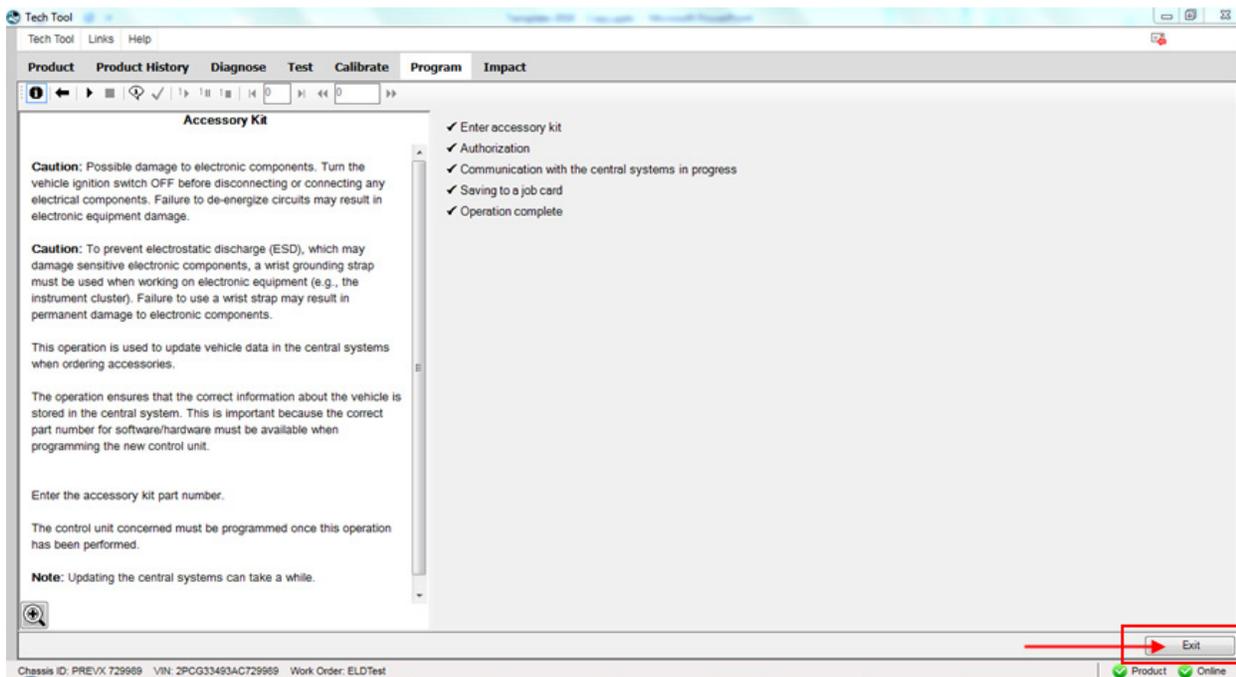
5. Press the PLAY button to open the dialog box then enter Accessory Kit # 85152926. Click OK.



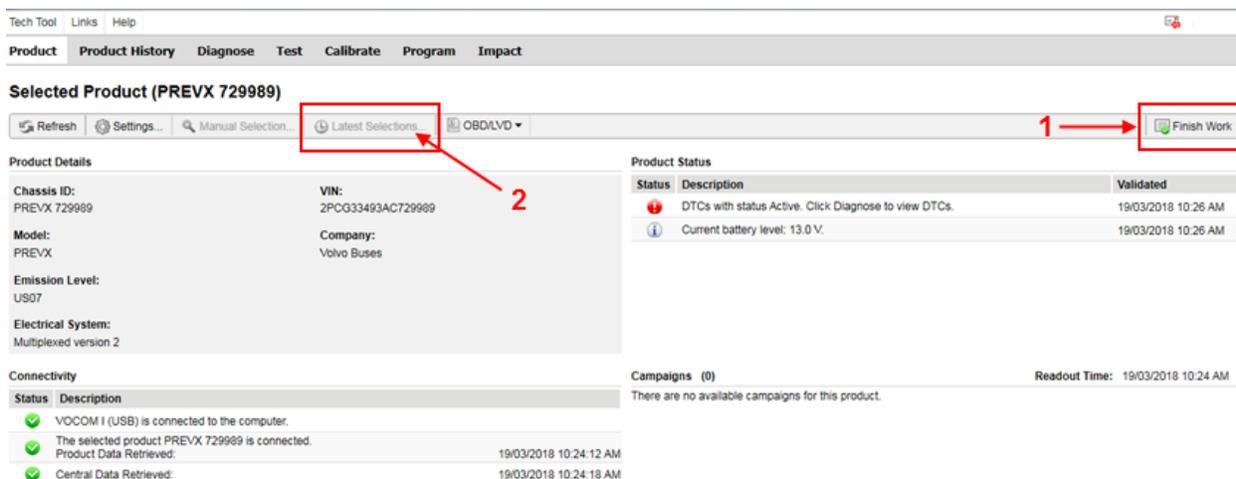
6. Complete the action by clicking OK on the following message.



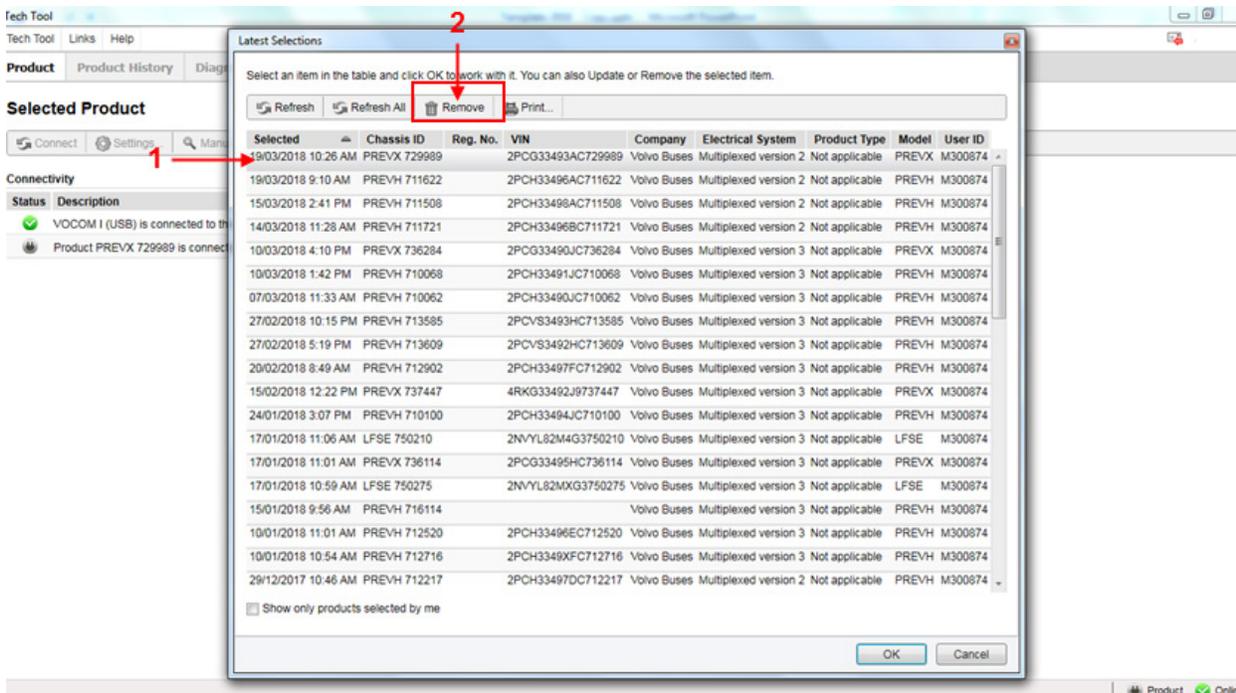
7. Once completed, exit the PROGRAM menu.



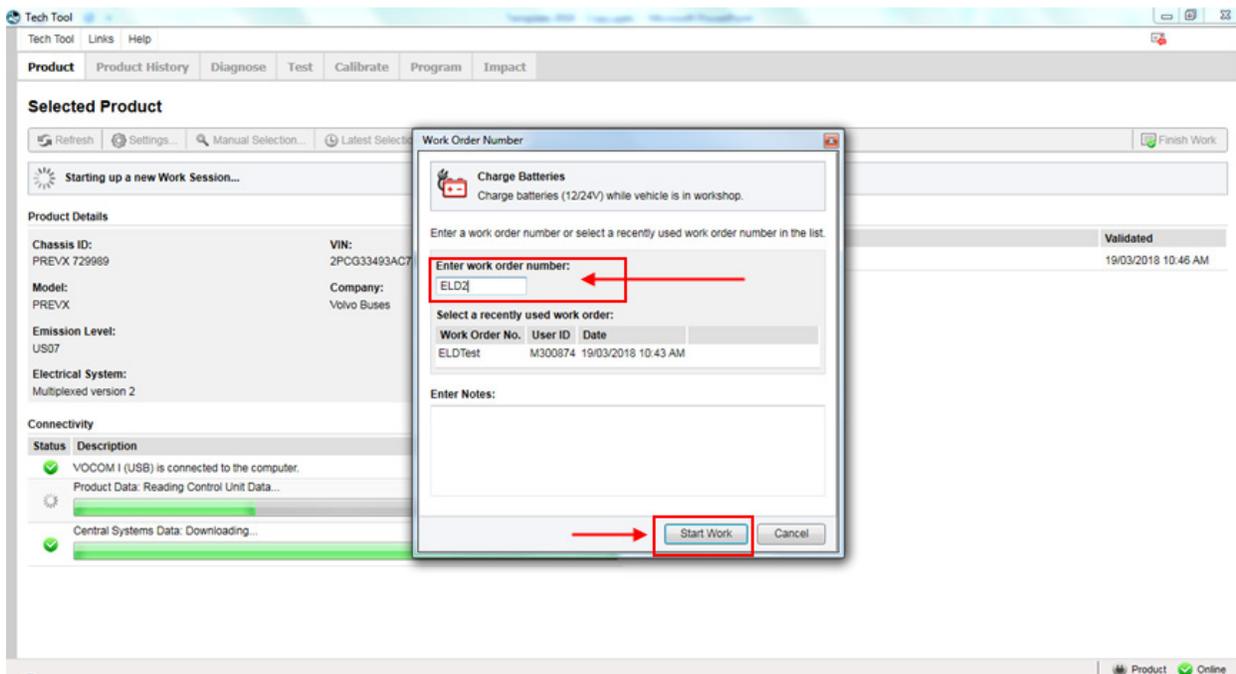
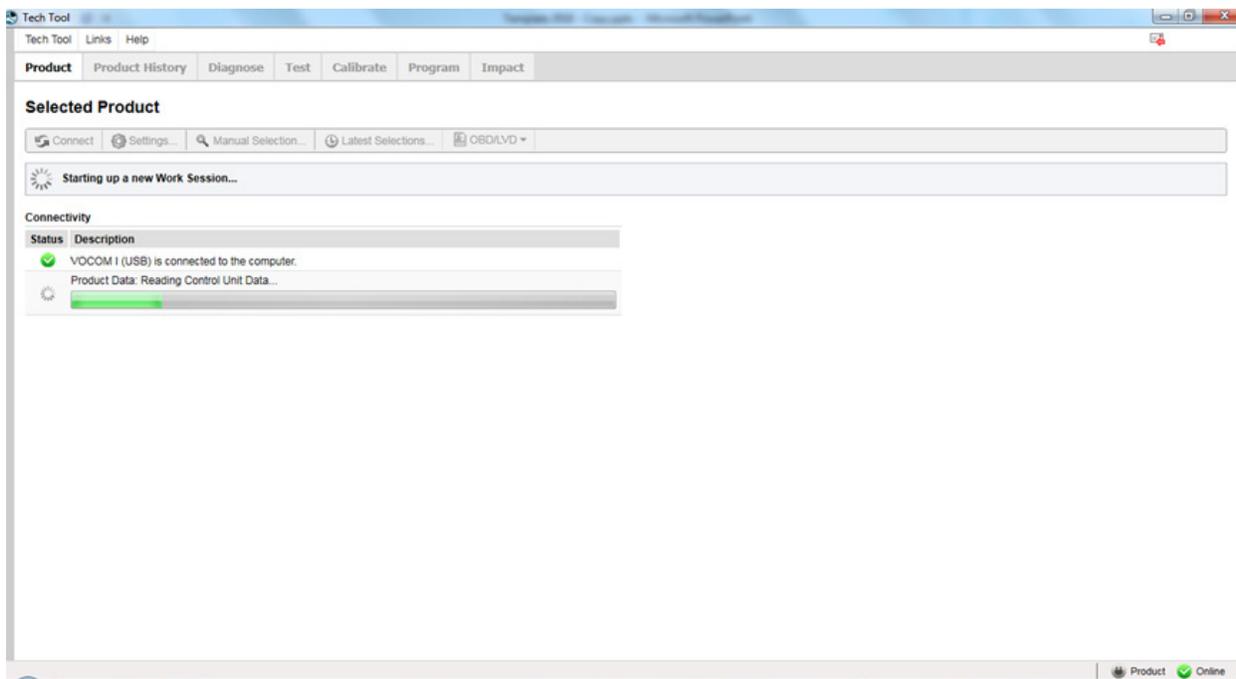
8. Select the PRODUCT menu and click *Finish Work* then choose *Latest Selections*.



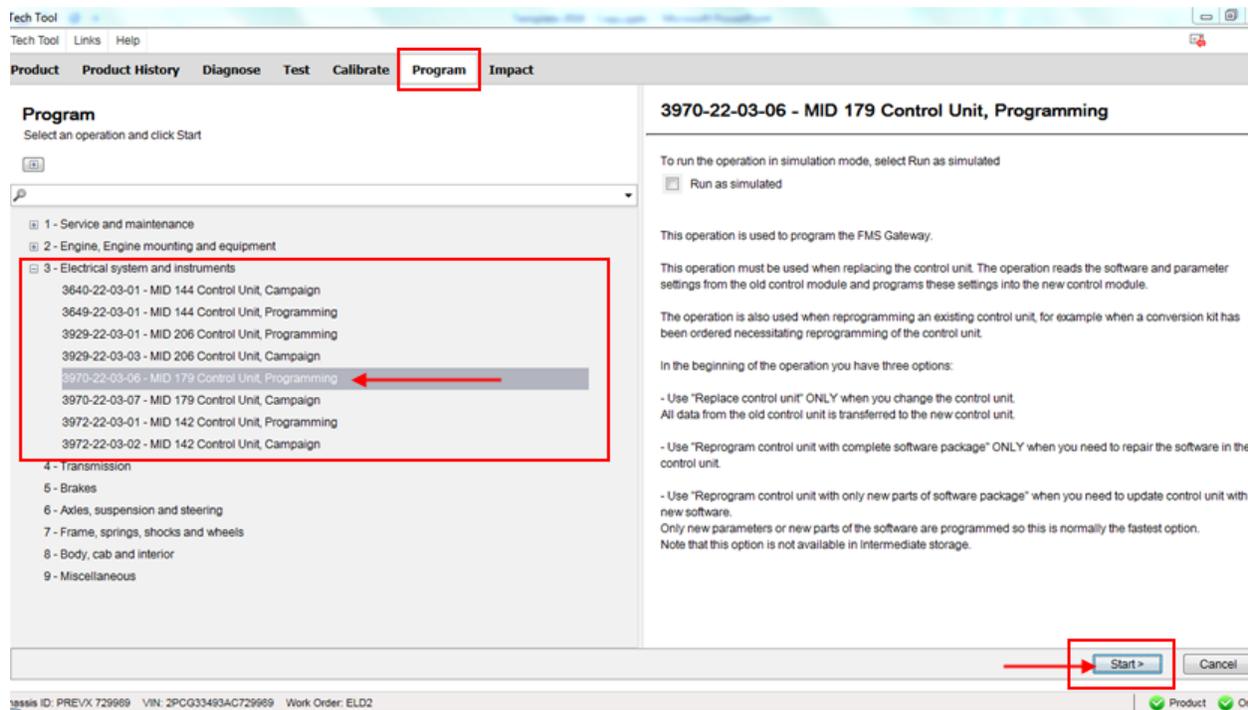
9. In the Latest Selection list, select (click to highlight) the corresponding job (validate with Chassis ID or VIN) then click *Remove*. The system is now ready to refresh the MID 179 – FMS Gateway information's and program the FMS Gateway module.



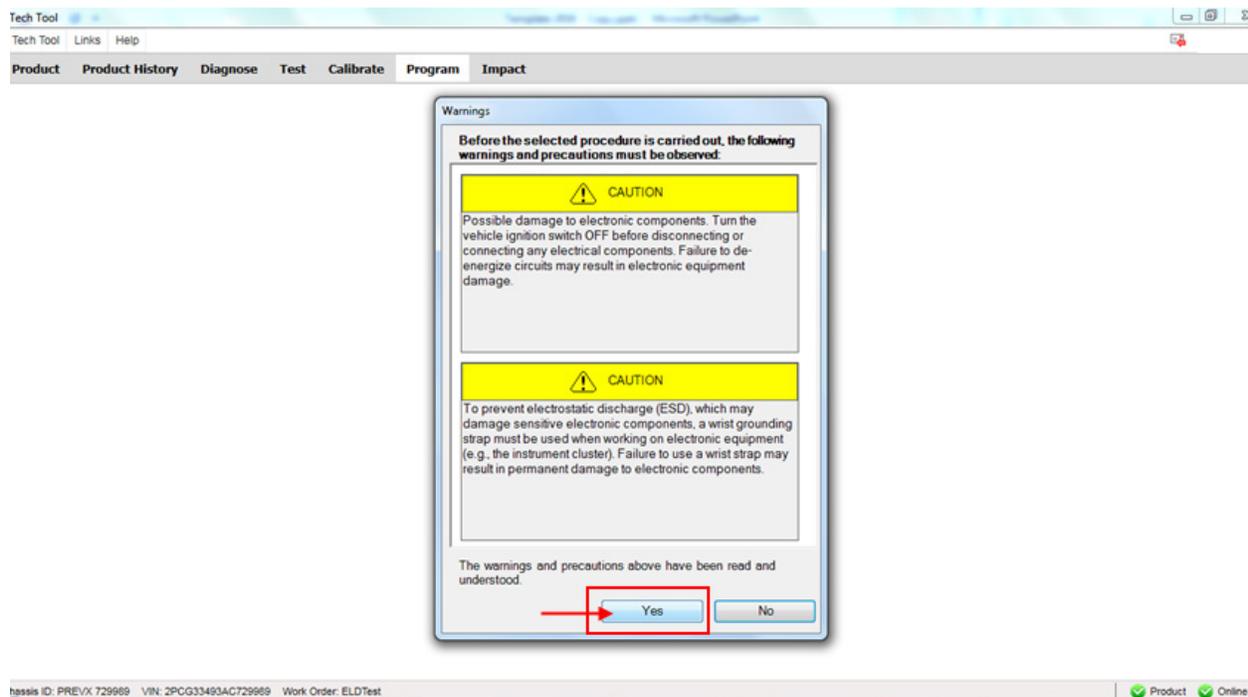
10. In the PRODUCT menu, start a new work session.



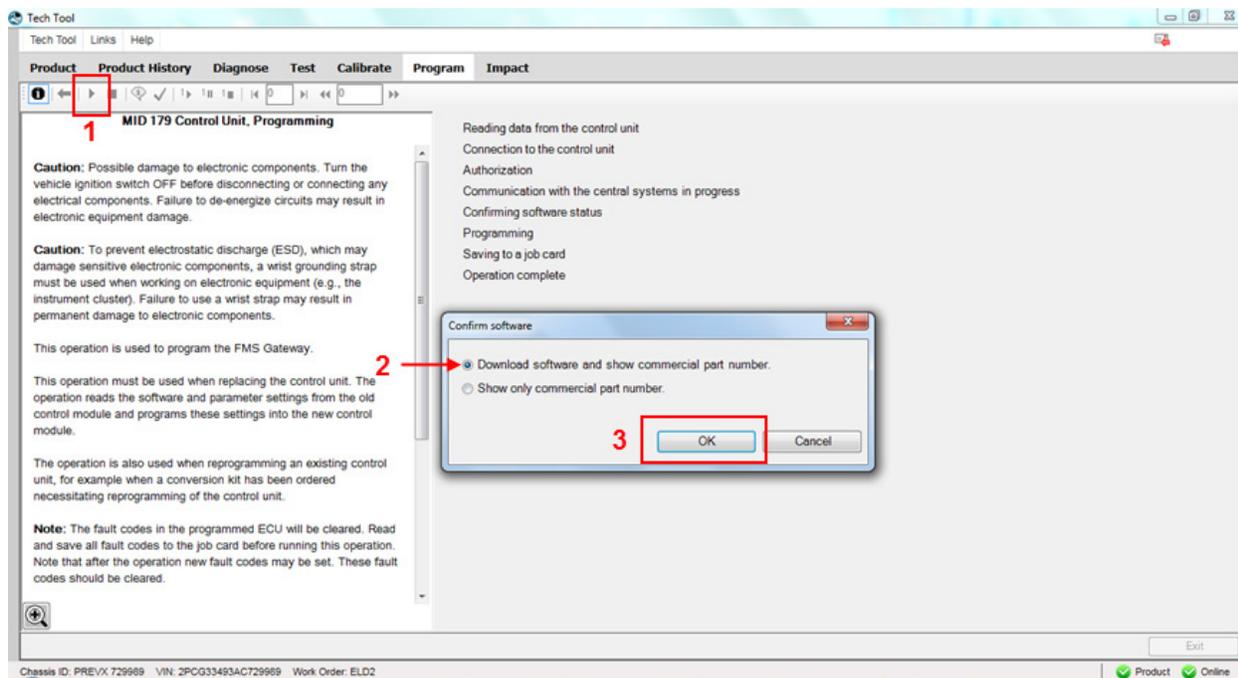
11. Go to the PROGRAM menu, expand the *Electrical System and Instruments* operation and select 3970-22-03-06 – MID 179 Control Unit Programming option (click START).



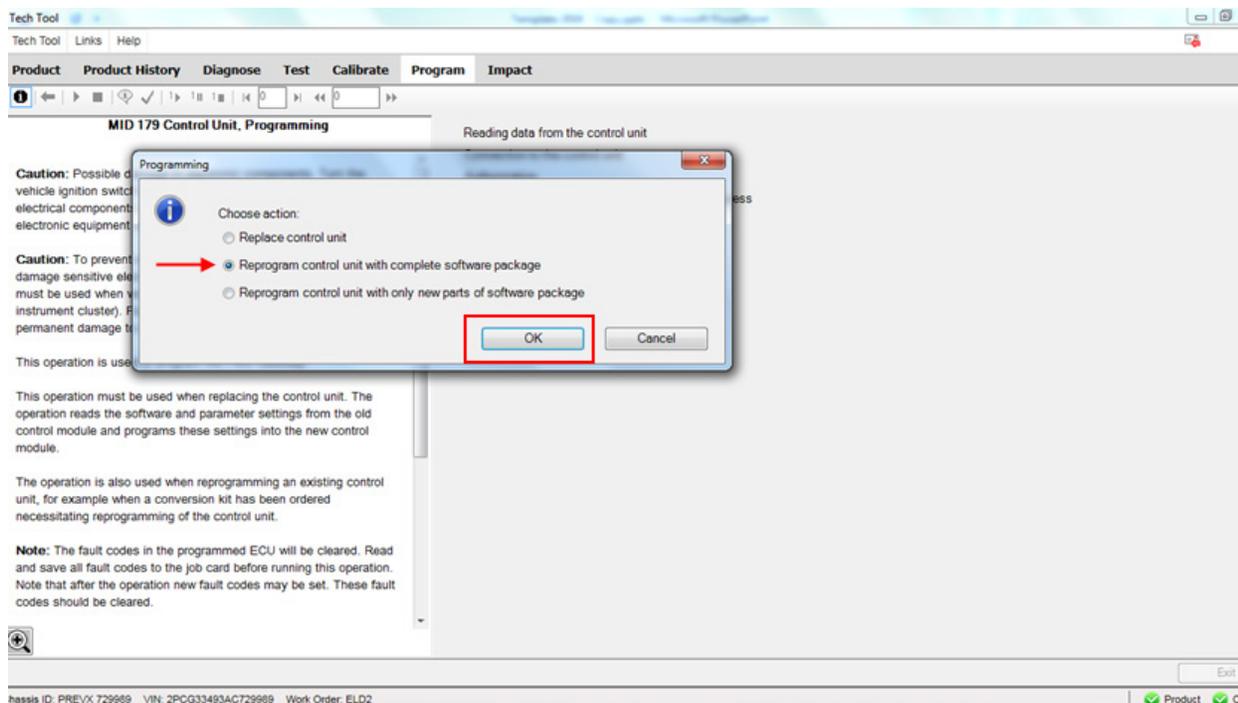
12. Click YES on the following message box.



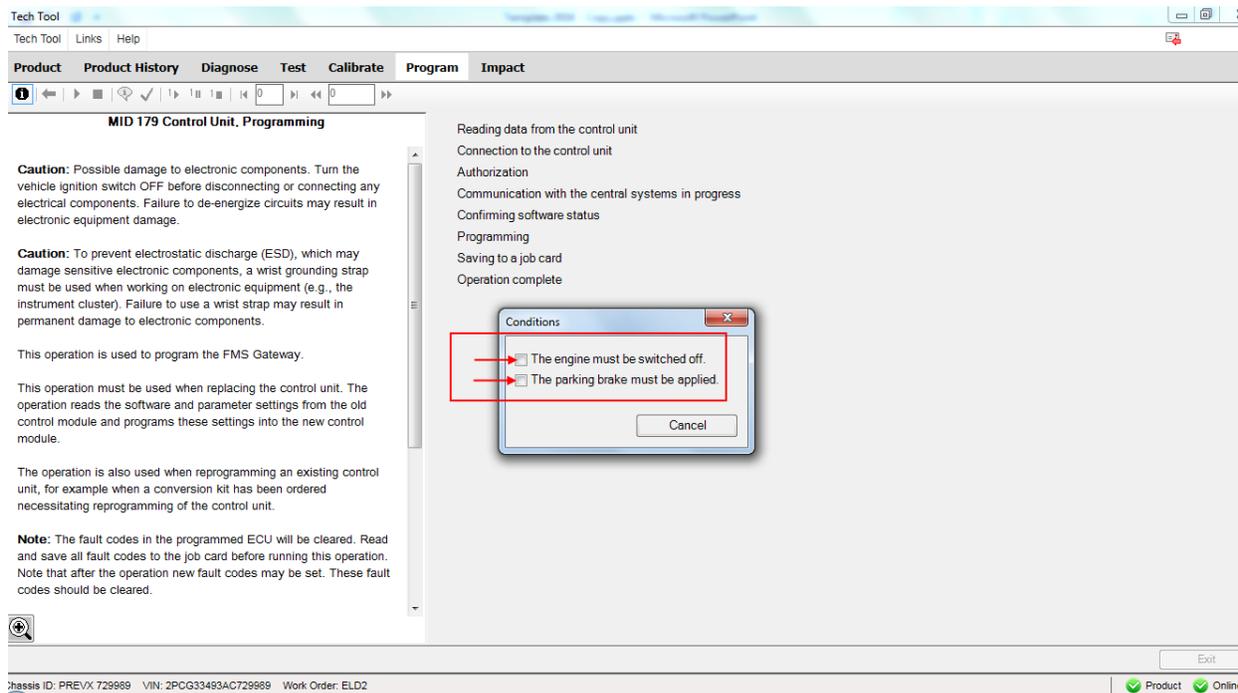
13. Click PLAY ▶ to open the dialog box then choose the *Download software and show commercial part number* option. Click OK.



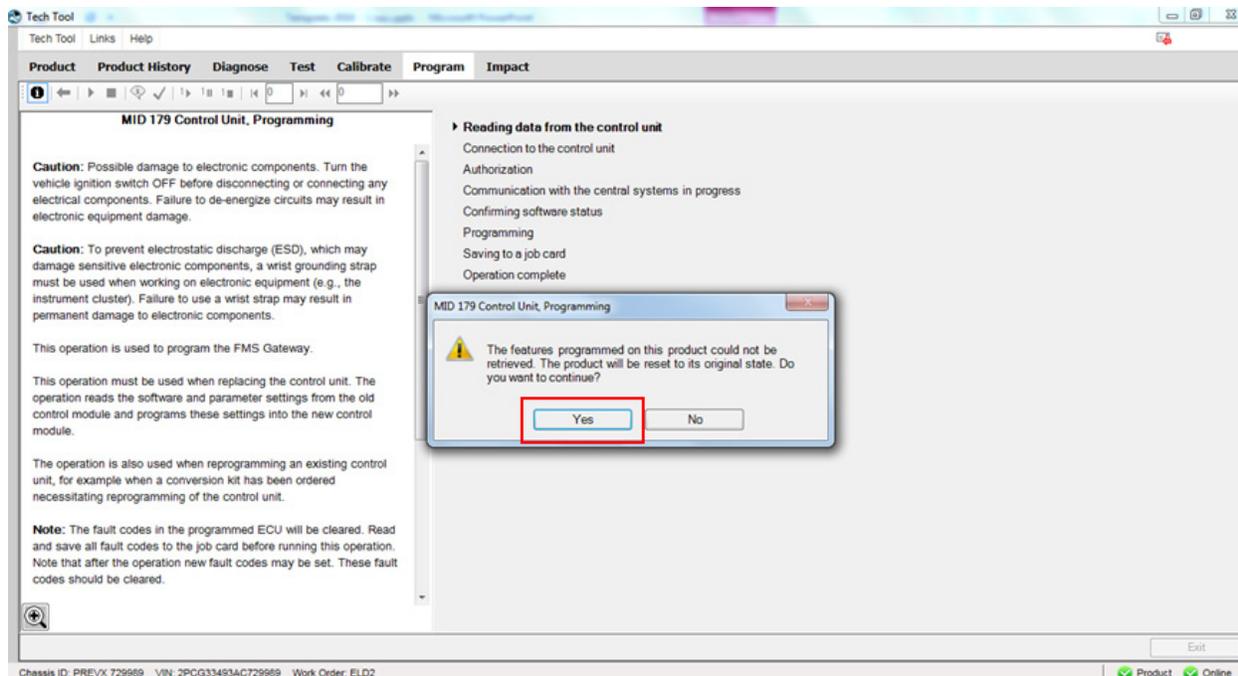
14. Select *Reprogram control unit with complete software package*, then click OK.



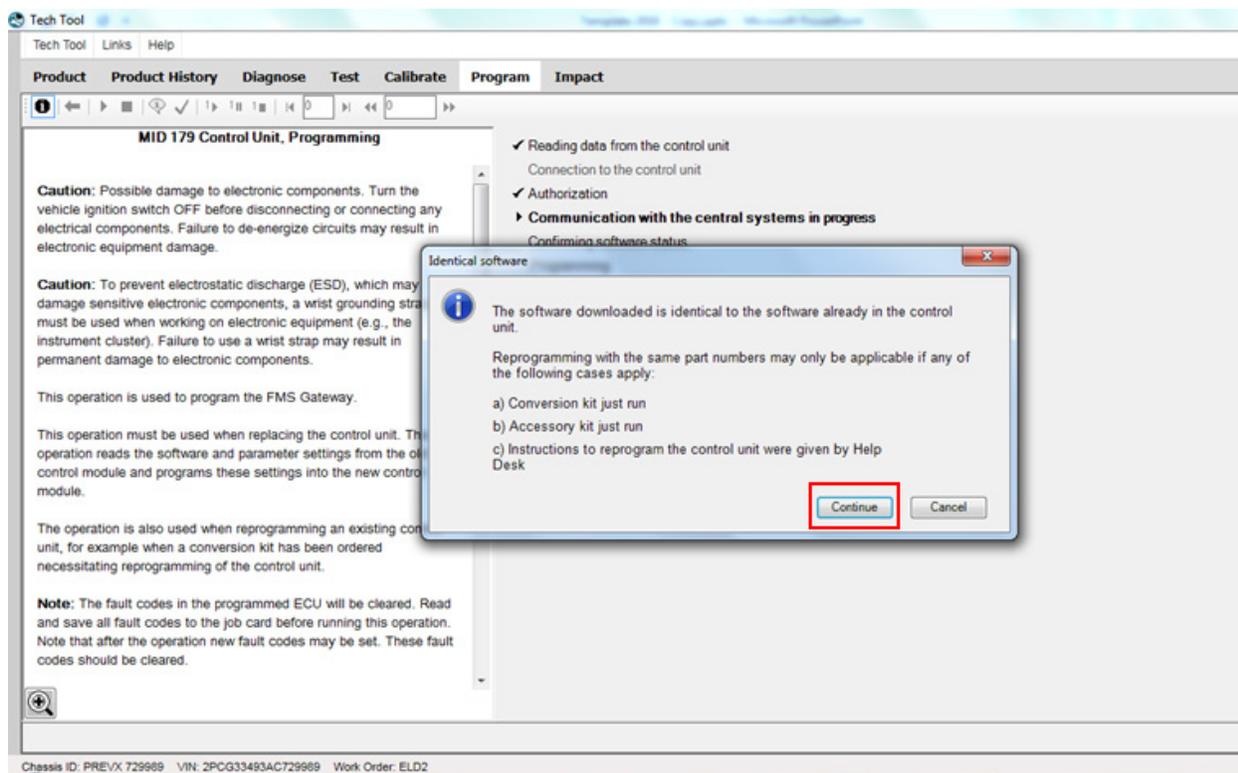
15. Confirm both conditions (engine must be switched off & parking brake applied) to continue.



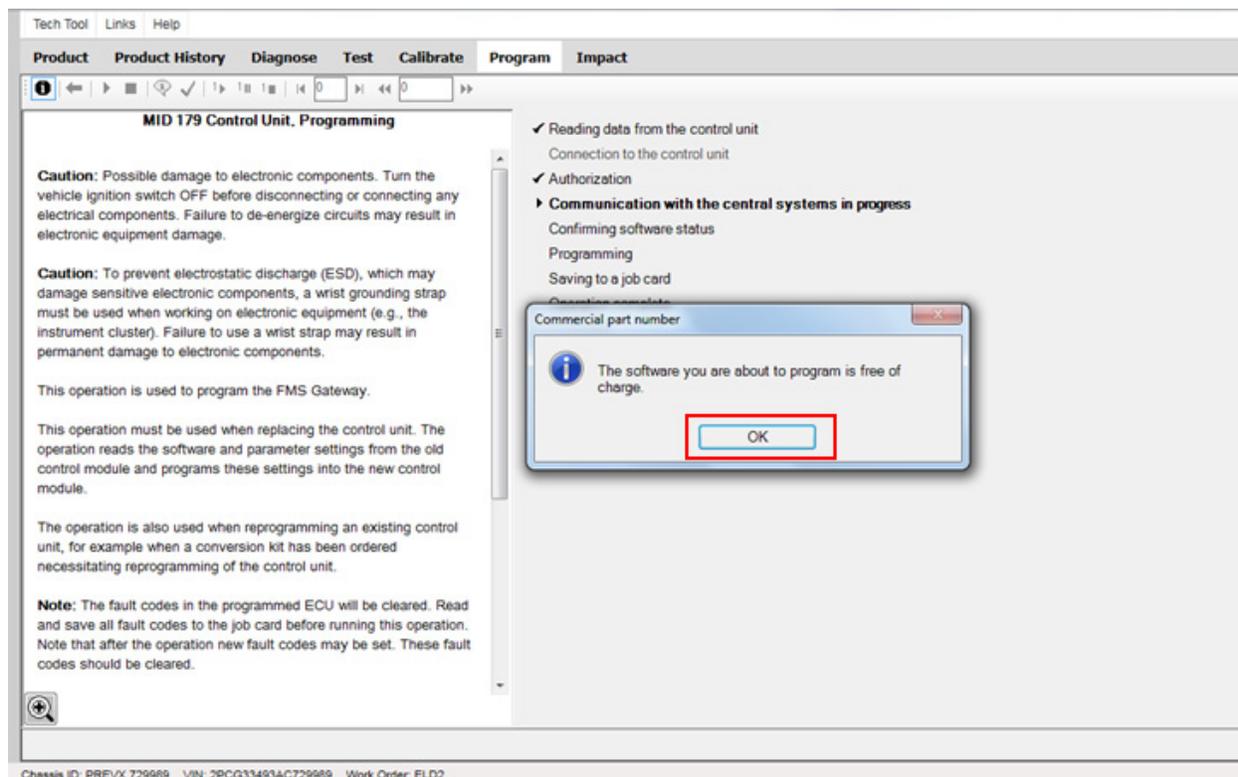
16. Click YES on the product reset warning.



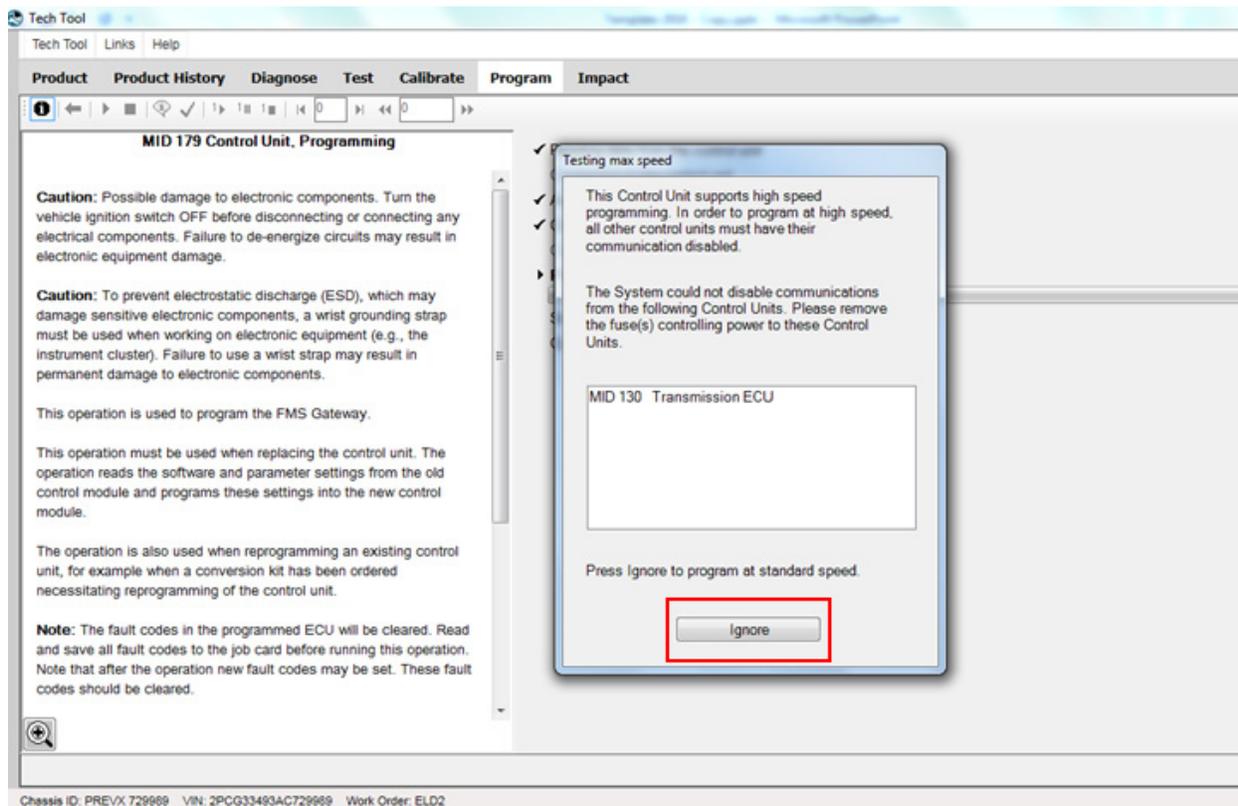
17. Click *Continue* on the identical software information box.



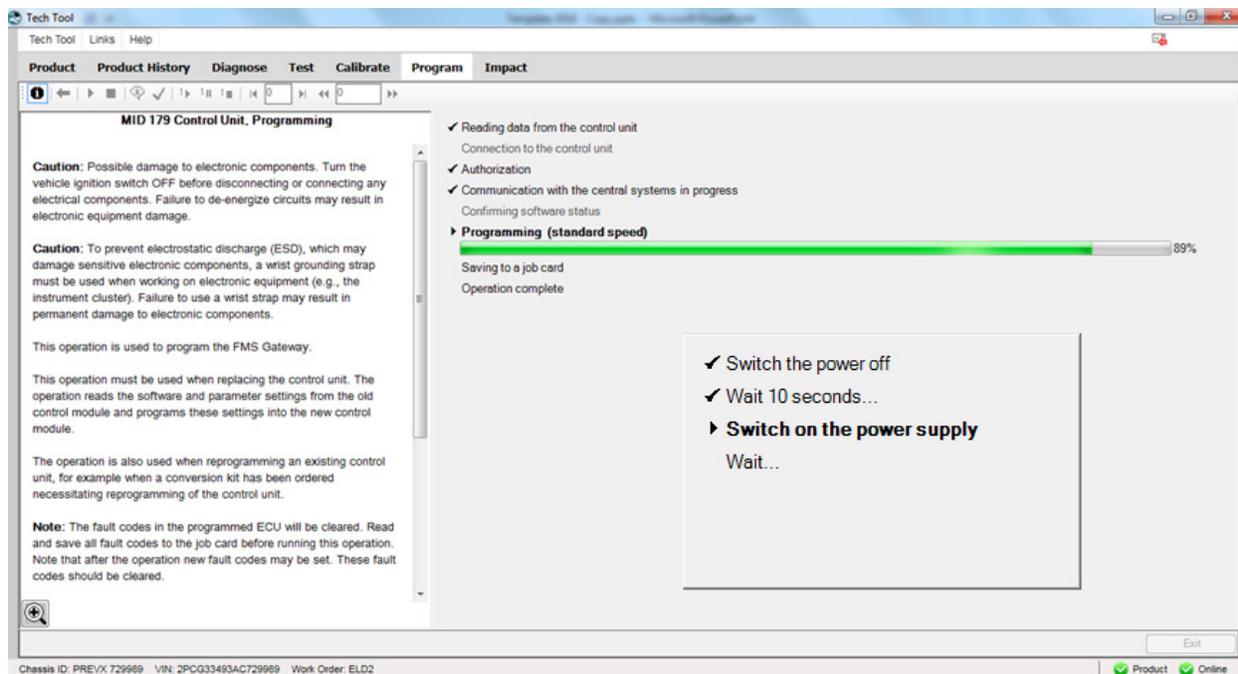
18. Software is free of charge, click OK to continue.



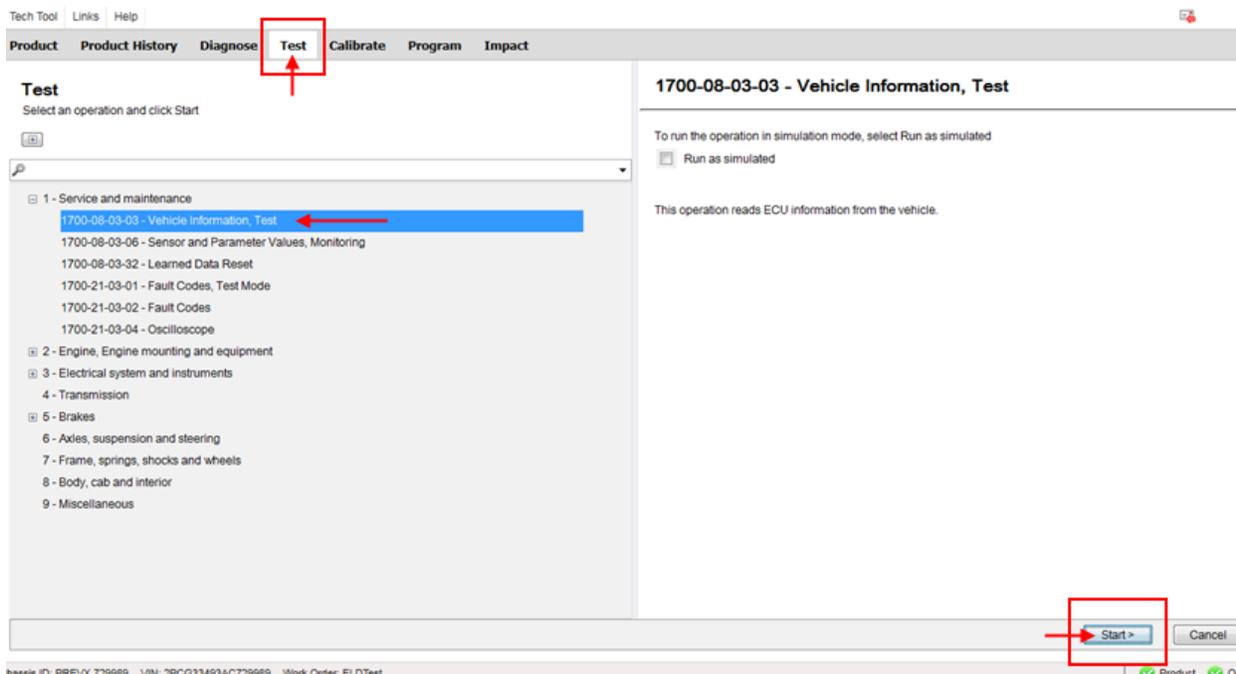
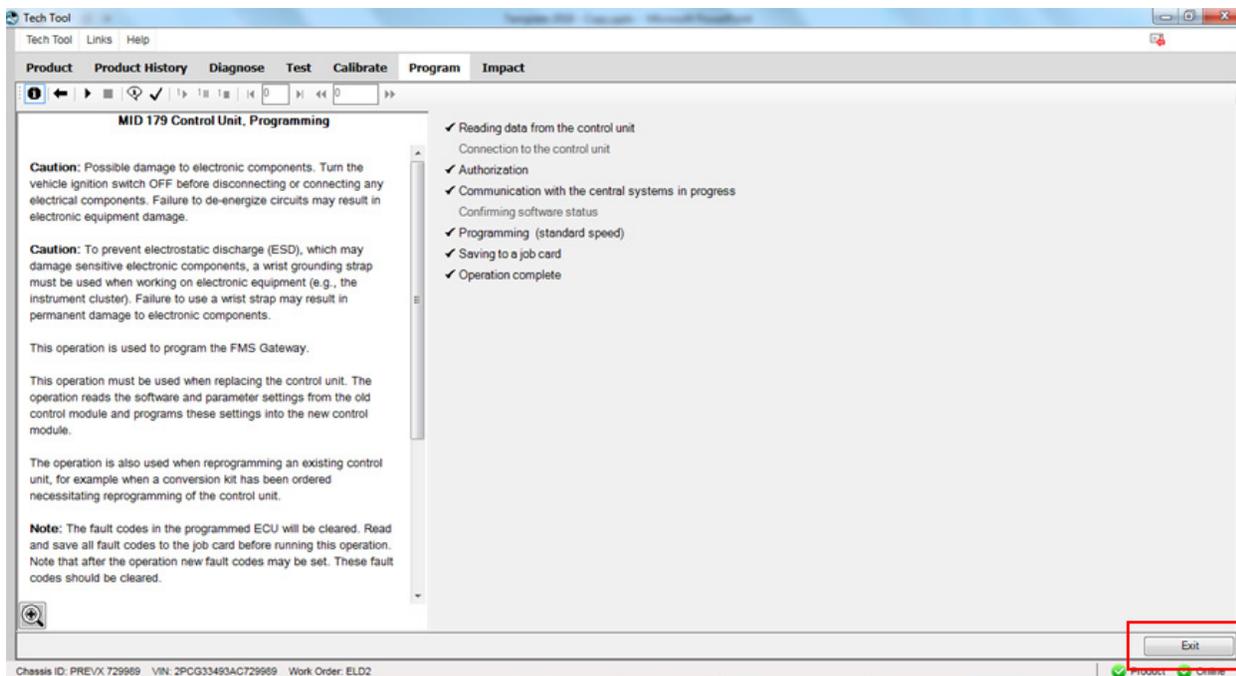
19. Choose IGNORE on the *High Speed Programming* option.



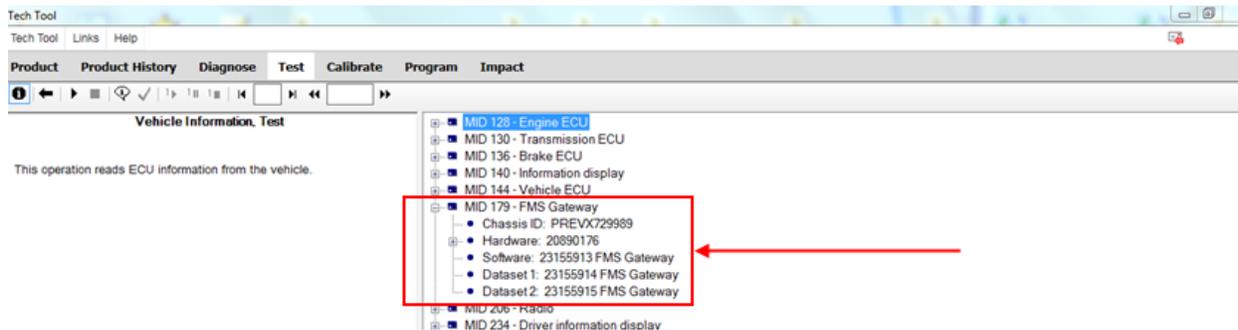
20. When prompted, switch the vehicle power to OFF (ignition switch), wait 10 seconds then switch the power ON again. Wait for the *Standard Speed Programming* to complete.



21. Once completed, exit the PROGRAM menu and go back to the TEST menu, select PROGRAM and expand operation *Service and Maintenance*, select *1700-22-03-06 Accessory Kit* and click START.

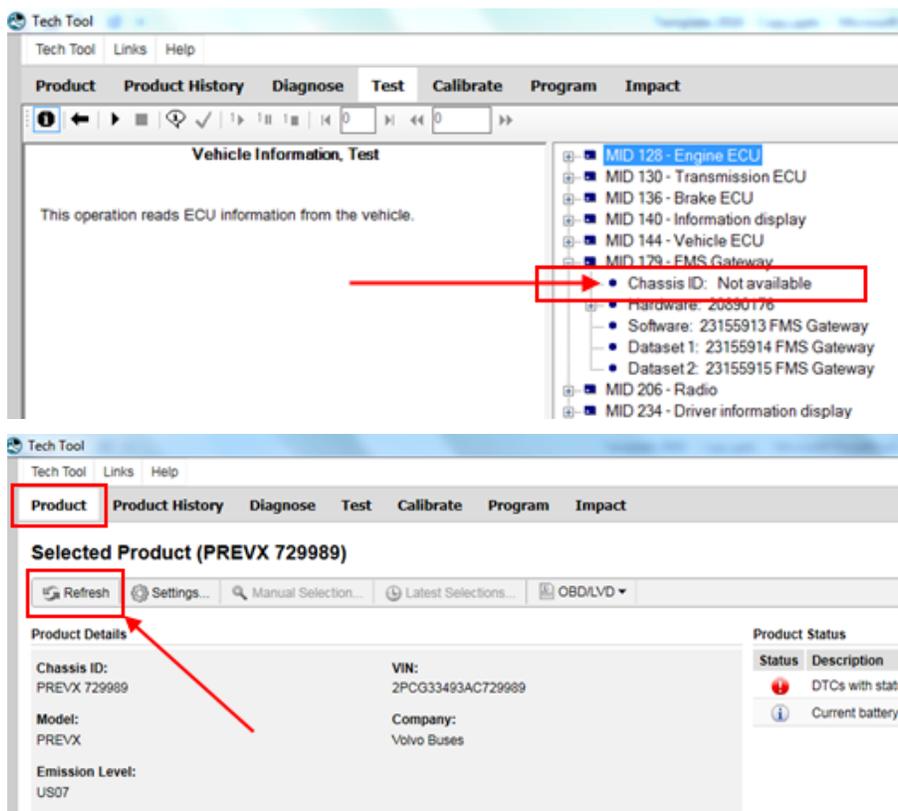


22. Confirm in Vehicle Information Test that MID 179 – FMS Gateway is present and that all related information's are now available.



**NOTE**

If the Chassis ID is still not available in MID179 – FMS Gateway, go back to the PRODUCT menu and click the REFRESH button.



23. Refresh and delete codes.

**PARTS / WASTE DISPOSAL**

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