

## Transmission Control Module, Programming VHD, VN

### SP 430-001, Transmission Control Module, Programming

(March 2015)

#### Information

Campaign to update the transmission software for vehicles built without the Eco-Roll feature enabled. The new software will provide improved performance should customers choose to enable this feature in the future. Vehicles affected are certain Volvo VHD, VNL, and VNM model vehicles manufactured from June 16, 2011 through August 18, 2014.

#### Required Tools

Premium Tech Tool version 2.03.71 or higher

Vocom Diagnostic Connector 88890304

Communication Interface 888903003

**Note:** Using other interfaces may affect programming speed.

**Note:** Check Premium Tech Tool version by clicking on Help tab and then click on "About Tech Tool".

#### Procedure



#### **DANGER**

Do not attempt to repair or service this vehicle without having sufficient training, the correct service literature and the proper tools. Failure to follow this could make the vehicle unsafe and lead to serious personal injury or death.

- 1 Verify service program eligibility by checking service program status in VDA.
- 2 Secure the vehicle for service by parking it on a flat level surface, applying the parking brake, chocking the rear wheels, and placing the transmission in neutral.
- 3 Connect Premium Tech Tool (PTT) to the vehicle diagnostics connector using the 16 pin OBD cable 88890304 and Communication Interface 88890300. Connect the PC to a functional LAN or modem connection and a 120 Volt AC source (do not use intermediate storage).
- 4 Turn the ignition switch "ON".
- 5 Log in to PTT and Identify Vehicle is displayed.

- 6 Once the vehicle has been identified, enter the Work Order Number information, then click Start Work.

**Work Order Number**

Enter a work order number or select a recently used work order number in the list.

**Enter work order number:**

**Select a recently used work order:**

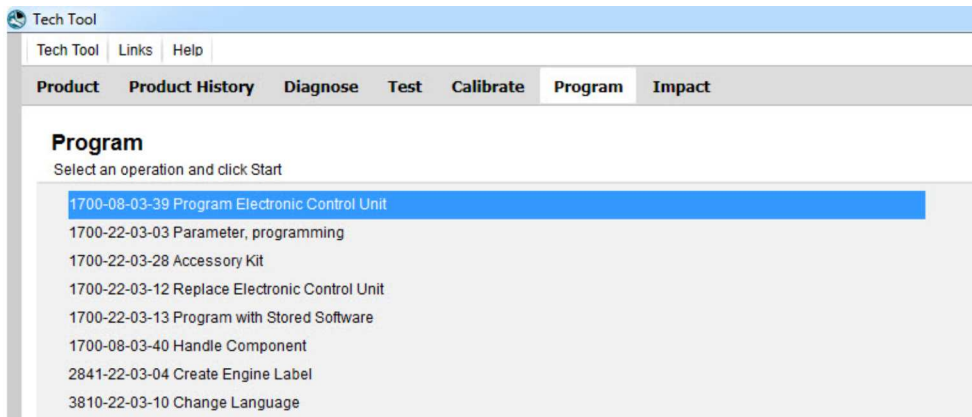
Work Order No	User ID	Date
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**Enter Notes:**

Start Work Cancel

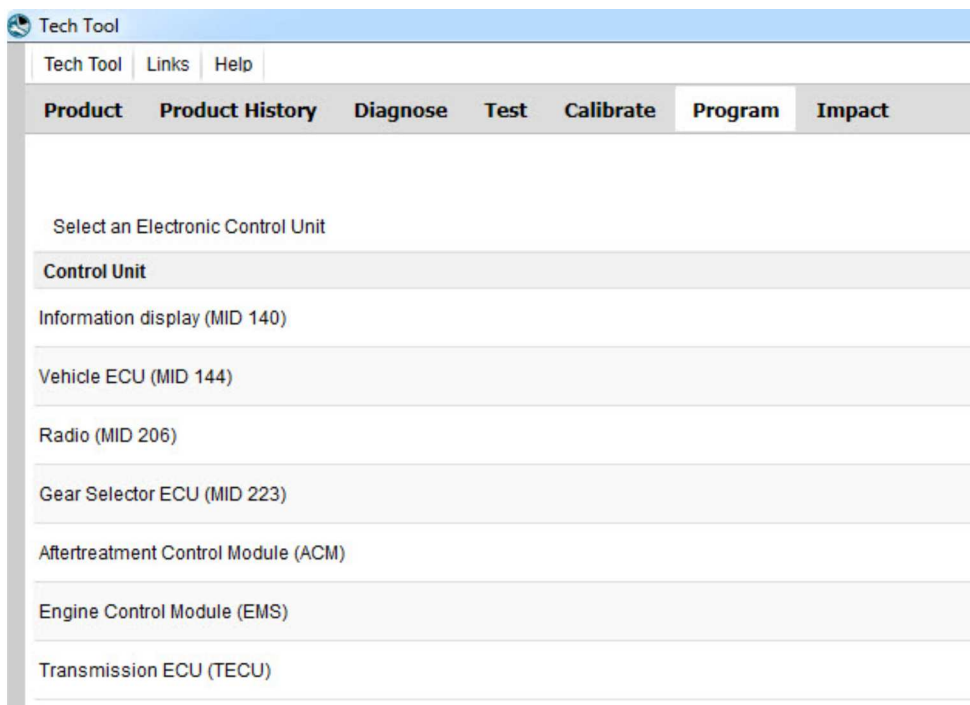
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- 7 From the Main Menu select Program and **then** Program Electronic Control Unit 1700-08-03-39. Then click Start.



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8 Select Transmission ECU (TECU) from the list.



The screenshot shows the 'Tech Tool' application window. At the top, there is a navigation bar with 'Tech Tool', 'Links', and 'Help'. Below this is a menu bar with options: 'Product', 'Product History', 'Diagnose', 'Test', 'Calibrate', 'Program', and 'Impact'. The main content area displays the instruction 'Select an Electronic Control Unit' followed by a list of control units. The 'Transmission ECU (TECU)' is the last item in the list.

Control Unit
Information display (MID 140)
Vehicle ECU (MID 144)
Radio (MID 206)
Gear Selector ECU (MID 223)
Aftertreatment Control Module (ACM)
Engine Control Module (EMS)
Transmission ECU (TECU)


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9 Select Program to update the electronic control unit with the latest software.

**1700-08-03-39 Program Electronic Control Unit**

Programming Options

- Update Electronic Control Unit with latest software
- Reload Electronic Control Unit with existing software
- Program software for development products



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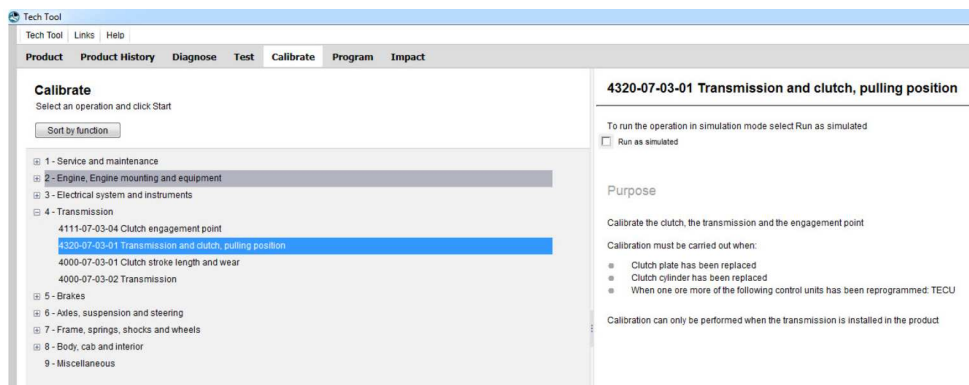
10 Certain conditions must be met to continue with programming: battery voltage above 10v, parking brake applied, and ignition key in ON position with engine not running. When all conditions have been met, click Continue to proceed with programming.

<b>1700-08-03-39 Program control unit - Update software</b>		
Automatically checked conditions		
1	 > 10 V	12.7 V 
2	  	
3	 rpm = 0 rpm	

1 Battery voltage above 10 V  
2 Parking brake applied  
3 Ignition key in ON position. Engine not running

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11 When TECU programming is complete, select Calibrate from the Main Menu. Select 4320-07-03-01 Gearbox, clutch, engagement point.



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12 When calibration is complete, clear any diagnostic trouble codes (DTC) and Finish Work.

**Reimbursement**

<b>This repair is covered by an authorized Service Program. Reimbursement is obtained via the normal claim handling process.</b>		
	<b>UHP Reim- burse- ment</b>	<b>eWarranty Reim- burse- ment</b>
<b>Claim Type (used only when uploading from the Dealer Bus. Sys.)</b>	B	B
<b>Recall Status</b>		
Vehicle inspected, repair not required		1- Inspected OK
Vehicle repaired per instruction		2- Modified per instruction
<b>Labor Code</b>		
Primary Labor Code	4300-22- 09-01 — 0.4 hrs	43124-0- 01 — 0.4 hrs
Time to take charge and determine campaign status	1700-16- 01-01 — 0.3 hrs	17003-0- 0 — 0.3 hrs
<b>Causal Part</b>	3092091	3092091
<b>SCC Code</b>	S6424	N/A
<b>Authorization Number</b>	N/A	SP430001
<b>Expiration Date</b>	31-MAR- 2016	31-MAR- 2016

**Note:** Take Charge Time is not included in the Labor Code for this operation. Take charge may be eligible but can only be used once per repair visit. If vehicle is having other warranty repairs performed, take charge should be charged to the warranty repair, otherwise take charge can be charged to this service program.