



No: 17 TL-8Rev  
 April 18, 2017

TO: Service Locations  
 FROM: Service Systems Development  
 Subject: **Vehicle Interface Module**

**GENERAL INFORMATION**

The Detroit™ special tools group has developed essential tool kit **DKI470E16025** Vehicle Interface Module (VIM). The 2017 VIM is required for all authorized service locations to perform warranty work on engines with GHG17 DDEC electronic controls.

The 2017 VIM is designed to isolate the engine from the chassis (i.e. EPA 07 – GHG17) for diagnostic purposes and for bench reprogramming (EPA 98- GHG17) Detroit engine controllers. The 2017 VIM is backwards compatible with all 2010 VIM optional cables (see tool letter 13TL-18 for details).

VIM Kit Components:

- Figure 1 – DKI470E16025-1 – VIM
- Figure 2 – DKI470E16025-2 – CPC3 cable adapter
- Figure 3 – DKI470E16025-3 – CPC/2/4 cable adapter

Figure 1 – DKI470E16025-1 – VIM



Figure 2 – DK1470E16025-2 – CPC3 cable adapter



Figure 3 – DK1470E16025-3 – CPC/2/4 cable adapter



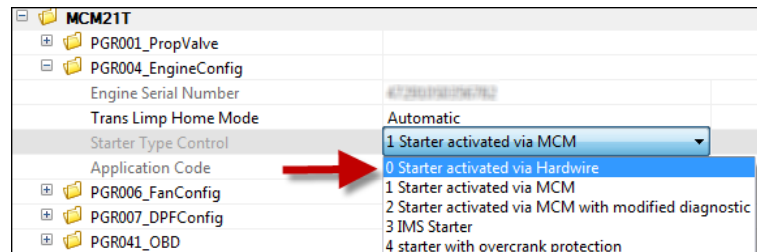
## INSTRUCTIONS TO REPROGRAM

To reprogram a CPC3 module on the bench, connect DK1470E16025-2 (CPC3 cable adapter) to the module interface harness connector of the VIM and to ports 3 and 5 of the CPC3 module. The VIM can be powered by W060589116300 (VIM AC to DC power adapter) and TRG100A12002V (AC Adapter 12V power supply) or a standard vehicle battery power cable.

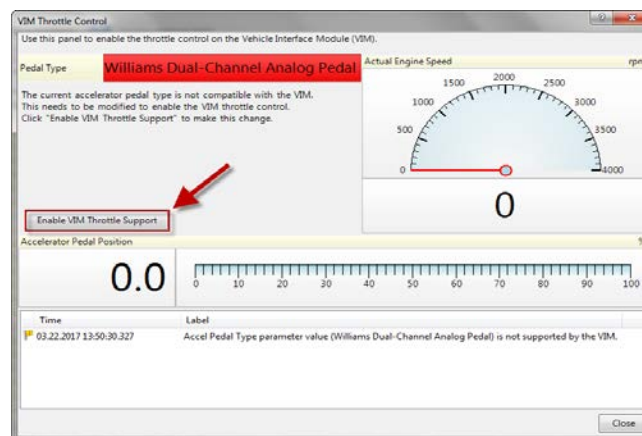
To reprogram a CPC2, CPC02T, or a CPC04T module on the bench, connect DK1470E16025-3 (CPC/2/4 cable adapter) to the vehicle interface harness connector of the VIM and to ports 1-4 of the CPC2, CPC02T, or CPC04T module.

## INSTRUCTIONS TO RUN ENGINE

1. Connect DKI470E16025-3 (CPC/2/4 cable adapter) to the vehicle interface harness connector of the VIM.
2. Connect to ports 1-4 of W060589216300 (test GHG17 CPC04T module).
3. Disconnect the vehicle 21-pin connector from both the MCM and ACM modules.
4. Since the W060589106300 (VIM to MCM/ACM cable) is too short to connect to both the MCM and ACM on GHG17 units, use J-49120 or W470589036300 (MCM extension harness cable) to connect to the 21-pin connector of the ACM and the W060589106300 (VIM to MCM/ACM cable). See **13 TL-21**.
5. Connect W060589106300 (VIM to MCM/ACM cable) to vehicle interface harness connector of the VIM and to the 21-pin connector the MCM.
6. Connect W060589146300 (vehicle battery power cable) to the VIM 12/24 Volt DC in port and to starter solenoid.
7. Connect W060589146300 (vehicle battery power cable) to battery.
8. Connect vehicle interface device (e.g. Nexiq USB-Link2) to the 9-pin diagnostic data link connector of the VIM and connect USB cable to computer.
9. Switch VIM ignition to key on engine off position.
10. Open DiagnosticLink. Verify connection to CPC4, MCM, and ACM.
11. Click the Parameters panel on the left side and expand the MCM parameters.
12. Change MCM parameter PRG004 (Starter Type Control) to '0 starter activated via hardwire' and accept change.



13. Switch VIM ignition to the crank position and start the engine.
14. To enable the VIM throttle control function, click the DiagnosticLink Actions panel located at the top tool bar, select VIM Throttle, and click 'Enable VIM Throttle Support'. The VIM throttle should now be enabled.



Once operation is complete, remember to change the MCM PRG004 (Starter Type Control) parameter back to '1- starter activated via MCM'. The engine will not start if this parameter is not changed as instructed. The VIM throttle should also be disabled when operation is complete.

### **ORDERING INFORMATION**

This tool is essential, and will be automatically shipped to all Dealers. Additional pieces can be ordered through the standard parts ordering process.

### **CONTACT INFORMATION**

Please contact the Detroit™ Customer Support Center at 800-445-1980 or email [csc@daimler.com](mailto:csc@daimler.com) if you have any questions.