

Vehicle Measurement Module (VMM) Kit Contents and Functionality

Vehicle Measurement Module (VMM) – Part No. 418-00001



The Vehicle Measurement Module (VMM) is a high-performance vehicle instrumentation module used between a PC and the vehicle to measure non-link based vehicle functions.

The VMM is used to measure functions such as Pressure Vacuum Transducer (PVT) based fuel systems, automatic transmission pressure, ignition systems, Digital Multi-Meter (DMM) and Oscilloscope pinpoint tests, and charging system tests.

IDS 4m PC Ethernet-USB Host Cable – Part No. 418-00002 (ID Label H-406)



The IDS 4m PC Ethernet-USB Host Cable is used to connect the VMM to the USB port on the PC.

This cable can also be used to connect the Vehicle Communication Module (VCM) to the PC at the USB port.

VMM Battery Cable – Part No. 078-00601 (ID Label A-401)



The VMM Battery Cable is used to power the VMM unit and provides a precise ground reference for some measurement routines.

VMM Pressure & Vacuum Transducer (PVT) – Part No. 078-00611 (ID Label C-407)



The VMM Pressure & Vacuum Transducer (PVT) is used with the VMM to measure low or high pressure and vacuum.

The PVT converts a pressure or vacuum measurement into an electrical signal, which is interpreted by the VMM and displayed in the Integrated Diagnostic Software (IDS).

The PVT connects to the Pressure & Vacuum Adapter Kit for pressure or vacuum testing and to the Transmission Extension Kit for transmission pressure testing.

The PVT measures pressure up to a maximum of 500 psi as well as vacuum.

Pressure & Vacuum Adapter Kit – Part No. 418-F242 (ID Label C-219)



The Pressure & Vacuum Adapter Kit consists of the Fuel Hose Assembly (FHA) and adapters for non-fuel vacuum testing.

The FHA attaches to the vehicle's fuel rail Schrader valve or to a T-adaptor Schrader valve.

The PVT connects to the FHA to measure fuel pressure or non-fuel vacuum.

Transmission Extension Kit – Part No. 418-F243 (ID Label C-220)



The Transmission Extension Kit consists of three adapters and a connecting hose.

The hose attaches to the automatic transmission with the proper adapter.

The PVT connects to the hose to measure pressure.

VMM Red Probe – Part No. 078-00602 (ID Label C-403) &

VMM Black Probe – Part No. 078-00603 (ID Label C-402)



The VMM Red Probe and the VMM Black Probe are used for measurements with the Digital Multimeter (DMM), Oscilloscope and Signal Generator Monitor (SGM) and for pinpoint tests.

The Red Probe has an acknowledgement button, which can be pressed to confirm a measurement without releasing the probe. This functionality is identical to pressing the tick/confirm button in the IDS application.



The Red Probe also has an LED to illuminate the work area when doing a measurement in a dark area such as under the dash.

Probe Tip Adapter Kit – Part No. 418-FS264



The Probe Tip Adapter Kit is supplied to ensure a good electrical contact with connectors when carrying out measurements on components with small contacts without damaging the connector or the contacts.

The probe tips included in this adapter kit can be attached to the red and black probes.

VMM Secondary Ignition Transducer Cable – Part No. 078-00606 (ID Label C-404)



The Secondary Ignition Transducer Cables are used to connect the VMM to either Secondary Ignition Transducer Clips or COP Clips to perform ignition routines. These cables can be used on a breakout box with Probe Tip Adapter Kit #2.

VMM Secondary Ignition Transducer Clip – Part No. 078-00607



The Secondary Ignition Transducer Clips are used with the VMM Secondary Ignition Transducer cable to measure ignition signals on vehicles that use secondary ignition wires.

VMM COP Clip 1 – Part No. 078-00608 (ID Label G-409)



The COP Clips are used with the VMM Secondary Ignition Transducer cable to measure ignition signals on vehicles that use Coil On Plug (COP) ignition systems.

Probe Tip Adapter Kit #2 – Part No. 078-00604



If supplied, Probe Tip Adapter Kit #2 has eight components. Four of those components are adapters used to attach the Secondary Ignition Transducer Cable to a breakout box using banana jacks. The remaining four are used to connect to other contacts.

Probe Tip Adapter Kit #3 – Part No. 078-00605



If supplied, Probe Tip Adapter Kit #3 has two components that are used to connect to a variety of contacts.

VMM 50 Amp Current Probe – Part No. 078-00609 (ID Label C-412)



If supplied, the VMM 50 Amp Current Probe is used to measure currents (50 Amps Max) by clipping over a vehicle wire to be measured.

VMM 500 Amp Current Probe – Part No. 078-00610 (ID Label C-413)



If supplied, the VMM 500 Amp Current Probe is used to measure currents (500 Amps Max) by clipping over a vehicle wire to be measured.

VMM Self Test Adapter – Part No. 078-00612 (ID Label ST-408)



The VMM Self Test Adapter is used in conjunction with the Self Test Adapter Software to test some parts of the VMM.

VMM Carrying Case – Part No. 078-0059



The VMM Carrying Case is used to transport and store the VMM and associated cables and transducers.