

Autodiagnos Multi-Tester *pro*

The name, Autodiagnos, should be familiar to regular readers, as we've featured the Autodiagnos Multi-Tester *plus* and Autodiagnos Breakout Box in previous issues of *Import Service*. The latest addition to the Swedish-made Autodiagnos line of diagnostic equipment is the Multi-Tester *pro*.

At first glance, the Multi-Tester *pro* looks like an oversized version of the Multi-Tester *plus*. The screen size has increased dramatically, and some convenient grab handles have been added to the outside of the case. The *pro* keyboard design also carries a strong familial resemblance to the *plus*.

The Multi-Tester *plus* was originally designed for a parallel interface with the vehicle's engine management system. A variety of adapters allowed the user to tap into the major European engine management systems, between the PCM and the vehicle wiring harness. The Multi-Tester *plus* saw the same input information the PCM saw. Toward the end of its development cycle, a Volvo-only module and harness were made available to the aftermarket repair industry. This gave the Multi-Tester *plus* serial communications ability on selected Volvo models.

All of the parallel interface wiring harness adapters and memory cartridges, as well as the Volvo serial interface equipment originally designed for the Multi-Tester *plus*, will also work with the Multi-Tester *pro*. So what's the justification for upgrading from a *plus* to a *pro*? The larger *pro* display is certainly an advantage, as more lines of data can be displayed simultaneously, along with function-specific HELP. Additionally, the *pro* model was designed with serial data capability built-in, rather than added on, as it was on the *plus*. This allows Autodiagnos to offer memory cartridges and harness connectors that tap into the extensive self-diagnostic capabilities of more recent engine management, as well as other vehicle systems.



In addition to the Volvo serial interface capability, serial Volkswagen-Audi and OBD-II memory cartridges and harness connectors are available for the Multi-Tester *pro*. Cartridges and harness connectors for other major European brands (BMW, Mercedes-Benz) are also currently in development.

According to Autodiagnos, the Volkswagen-Audi cartridge gives the Multi-Tester *pro* 'factory-grade' diagnostic capabilities, while the OBD-II cartridge and harness connector provide the standardized OBD-II interface, data display and communications format. The four major OBD-II interface protocols (ISO 9141, J1850 PWM, J1850 VPW, KWP 2000) are supported by the Multi-Tester *pro*. The Multi-Tester *pro* automatically determines which OBD-II interface protocol the vehicle uses.

We connected the Multi-Tester *pro* to several late model Audi and Volkswagen models to produce most of the photos that follow. We also connected it to a domestic vehicle to see how it would handle the OBD-II handshake on a non-European vehicle.

As always, the value of any diagnostic equipment is derived from its ability to give easy access to otherwise inaccessible information. In capable hands, the Volkswagen-Audi and OBD-II memory cartridges for the Multi-Tester *pro* provide that information in spades. If you would like to receive additional information about the Autodiagnos Multi-Tester *pro*, **Circle Number 115** on the Reader Service Card. ■

—By Karl Seyfert



The Volkswagen-Audi memory cartridge is first. Early VW-Audi OBD systems use proprietary connectors, while later OBD-II compliant vehicles use the standard OBD-II connector to access their more extensive diagnostic capabilities. On-screen is a partial listing of potentially available vehicle systems.



We selected the Brake/ABS system for further diagnosis. All choices for each vehicle system are arranged in a multiple choice menu format. The box below the menu choices provides additional information on the current menu selection. A separate HELP key provides additional information.



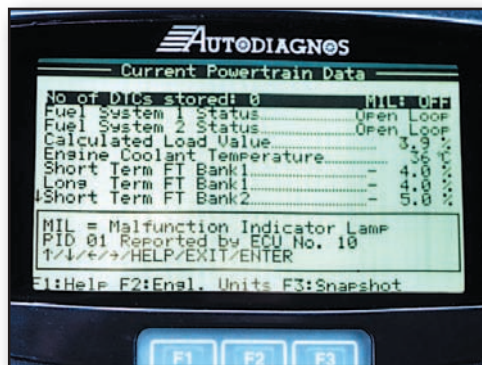
The Multi-Tester pro is collecting DTC's from the Brake/ABS control module. It's also possible to scan all available vehicle systems for stored DTC's. However, the pro didn't appear to know which systems the vehicle had until it checked for every possibility. Using the vehicle selection menu can avoid this.



Two DTC's were detected during the whole-car scan. Highlighting an individual fault identifies the particular vehicle system (transmission in this example) gives additional information in the HELP box at the bottom of the screen. Pressing the F1 key provided additional information on the speed sensor (insert).



Volkswagen/Audi live data is displayed in groups, using the same format as the factory service tools. To get the most out of this information, you'll need the associated factory service material and a familiarity with the vehicle systems. No problem for a specialist, but daunting for a neophyte (like your humble scribe).



This screen should be familiar to all technicians. The Autodiagnos OBD-II pro cartridge displays OBD-II in its standardized form. The tester adjusts to reflect the characteristics of the selected vehicle's OBD-II system. Once again, the box at the bottom of the screen provides additional information on the selected item.