



December 2006

I/M Update

Pennsylvania Emissions Inspection Publication

SOFTWARE UPDATES

Enhancements

The newest version of your OBD/VIS Analyzer software has been improved upon significantly in the areas of usability, reliability and functionality. Stations that have received an updated version of software to their OBD/VIS emissions machine will benefit from the following enhancements:

- CAN (Controller Area Network) equipped vehicles are now supported. CAN is the newest communication protocol utilized by vehicle manufacturers between the vehicles DLC and externally connected scan tool, such as the OBD analyzer. Some vehicle manufacturers began using CAN protocol as early as 2003, thus PennDOT realized that we needed to make the current version of software fully CAN capable and enabled.
- Increased Vehicle Communication - The OBD analyzer software is now capable of communicating with better than 98% of 1996 and newer model year vehicles.
- Continuous Monitors – (i.e. Misfire, Air/Fuel & Comprehensive Component) the newest version of analyzer software will no longer include the continuous monitors in the monitor count in order to determine if a vehicle is ready for testing.
- Record Retrieval – As of the new version of software you are now able to go back a minimum of 45 days to retrieve VIR reprint list, station used sticker report, sticker issuance report & test record search and retrieval.
- Field Length for Vehicle Model – The new version of software now allows the inspector to properly identify any vehicle model identified with a single character for the model name.

Latest Software Versions

Determining which version your analyzer is running

Going forward you are only permitted to run the latest PennDOT approved software. Here is a breakdown of the latest certified & approved software versions by equipment manufacturer:

- EASE v0515
- ESP v0602
- Snap-On v0602
- SPX v0602
- Systech v0606
- Worldwide v0602
- Waekon - New version not yet released

You can verify the version of software on your analyzer via several methods:

- **VIR** (bottom of printout)
- **Equipment Status Screen** (from the Main Menu, select Vehicle Emission Inspection, then select the Equipment Maintenance Menu)
- **Main Menu** (usually in the corner or bottom of screen, but not all equipment manufacturers display the version number.)



VEHICLE COMMUNICATION

Testing vehicles that do not communicate with the OBD Analyzer

The newest version of your OBD analyzer software has significantly decreased the number of non-communication test results. We expect that vehicle no-comms (where no communication can be achieved between the vehicles DLC and OBD test equipment) to be approximately 1-2 tests out of 100. For this reason, going forward, Non-Communication with vehicles should be handled in the following manner:

1. Ensure all screen prompts on the analyzer, are followed to the letter.

NOTE: Certain vehicles will not communicate properly, for example:

- If the key is not cycled OFF/ON for a minimum of 30 seconds
- If the vehicle is not restarted prior to connection of the DLC
- If this is the first attempt, and/or only one attempt is made at communication...

2. Attempt a minimum of 3 tries at communicating with the vehicle.

3. Prior to the third attempt, disconnect the test lead from the vehicle and...

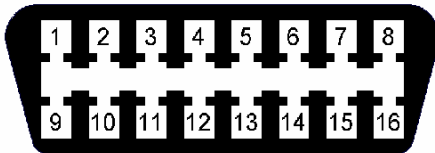
A. Inspect the ANALYZERS TEST LEAD for the following:

- Corrosion
- Oxidation
- Broken or Bent Pins
- Worn, stretched, degraded test lead and/or cable ends

NOTE: Indications of worn out or degraded cable may include a sudden and/or significant increase in no-comms, unexpected test results, etc...

B. Inspect the VEHICLES 16-PIN DLC for the following:

- Individual Female Contacts of DLC pins spread apart
- Proper voltage at Pin #16 (Battery Positive - fulltime)
- Proper grounds at Pins #4 (Chassis Ground) & #5 (PCM Ground).



NOTE: We have found that many of the no-comms end up being the result of no voltage supply to pin #16 (possibly a blown fuse).

SIDEBAR: One of the most common phone calls into our hotline regarding No-Communication usually start out by the inspector stating that their personal scan tool communicates with the vehicle but their OBD Analyzer does not. One reason is that there are multiple grounds in the vehicles DLC connector (Pins 4 & 5) and not all OBD scanners utilize the same pin for ground. Therefore, an aftermarket scan tool may communicate with vehicle but the OBD analyzer does not. Recommendation... check all three Pins (#16 fulltime battery voltage, #4 Chassis Ground, #5 PCM Ground) during any Non-Communication diagnosis.

4. Resolve/Repair any issues with the DLC Link and/or Cables and continue with the test.

NOTE: Repairing/Replacing a blown fuse for the DLC, a bad ground, a degraded cable does not place you in jeopardy of violating the test "AS-RECEIVED" specification (177.201) of the Vehicle Emission Regulation.

Why, because you are not changing the physical outcome of the test.

Vehicle Communication is required in order to successfully determine the current MIL command, Readiness, and DTC status.

5. If the vehicle still does not communicate, and you have done your due diligence, proceed with a non-communication result.

**Call the Station
Operator Hot Line:
1-888-265-5909**

For answers or help with:

- Enrollment into the Emissions Program.
- Network Connections & Operations.
- Analyzer problems, user ID, password & system access.
- VIID application problems.
- VIID database problems.
- Readiness Issues.

**You or your customers may
call the Customer Hot Line:
1-800-265-0921**

For answers or help with:

- Waivers
- Exemptions
- Complaints
- General program information

Drive Clean Website:

Visit us on the web at
www.drivecleanpa.state.pa.us



IMPORTANT PROGRAM INFORMATION

✓ **Visual & Gas Cap Testing Pittsburgh & Philadelphia Regions:** Effective January 1, 2007 all 1975- 1981 model year subject vehicles registered in the 5-county Philadelphia and 4- county Pittsburgh regions will require a gas cap & visual test only. This is a change in the emissions test types for the Pittsburgh & Philadelphia regions in accordance with Chapter 177, Pennsylvania Emissions Inspection Program, Section 177.51 Program Requirements.

Note: The software in the TSI / ASM equipment will incorrectly direct the inspector to perform a tailpipe test. The gas cap & visual test can only be performed on OBD II or visual equipment.

✓ **Enhanced Safety Program:** PennDOT is currently working on a new program, created in an effort to reduce fraud & provide a uniform inspection for rebuilt salvage vehicles that will consist of a network of specially equipped enhanced vehicle safety inspection stations. These stations will be under contract with PennDOT and will require specially trained inspection personnel. The implementation date for the Enhanced Safety Program is January 1, 2007. Stations which have additional questions or would like to request more information can contact Dennis Himmer at 717-783-5841.

✓ **e-Safety:** PennDOT and Verizon Business continue to work on refining the e-Safety web based application. At the request of stations and dealerships, PennDOT has asked Verizon Business to investigate the interest of third party vendors (existing shop management systems and electronic MV-431 and MV-480) participation in the program.

✓ **Sticker Usage Report:** Upon finishing a 3-day-calibration on your analyzer the IM team recommends that a data file refresh be conducted and a sticker usage report for the previous week be printed and held for the QAO for his/her next audit. This is also beneficial for the station authority to review their sticker history and completeness and correct any mistakes in their sticker issuance process that may have occurred.

✓ **MV-443 / MV-516 Forms:** PennDOT has updated the MV-443 and MV-516 forms and they are now available on the PennDOT website. www.dmv.state.pa.us. The change to the forms was due to the many requests from station owners & technicians to have the technician operator number removed from the form.

✓ **911 Address / Zip Code Changes:** To better work with the 911 systems, many stations are being required to change their address to a more specific listing. Additionally, the United States Postal Service is making some changes throughout the state to certain zip codes. Should your station be affected by either of these changes, please make sure you contact your QAO.



Pennsylvania Emissions Team
Regional Office
401 Commerce Park Drive
Cranberry Township, PA 16066



Routing Slip

Circulate to:

- Shop Foreman
- Service Manager
- Service Advisor
- Emissions Inspector
- Technician

Things You Should Do...

Bulletins, Scope Messages & Newsletters

❖ **Read the information that is sent to your station:**

Stations should make sure that all technicians are reading updates, bulletins, scope messages and newsletters that are sent from PennDOT and the Pennsylvania Emissions Team. These documents are sent out to alert stations of changes, updates & clarifications. Every technician must be kept up to date on the most current program information in order to do their job correctly.

❖ **Keep the information on file as an easy reference for employees:**

Please take note of the new 3-hole punch format of the I/M Update Newsletter, we strongly recommend that stations keep this I/M Update as well as any other messages or bulletins in a 3 ring binder. This information should be kept in an easily accessible location as your Emissions or Safety regulations manual would be kept.

Things You Should Know...

Hardware, Software & Procedures

❖ **Always verify Bar Coded information is Correct:**

Bar Code readers do succumb to degradation from age, dropping, etc. In some cases a malfunctioning bar code reader may seem as though it captured the data correctly, but in reality is displaying a previously bar coded vehicle's information (VIN, Title, License). Please take the time to verify all data captured via the Bar Code Reader prior to continuing with the test. Remember, the Inspector is responsible to verify all data entered is correct. If the Bar Coded data is incorrect, please contact your equipment manufacturer to have the Bar Code Reader Inspected and/or replaced. Meanwhile you can restart the analyzer and attempt to scan the registration card again or manually enter the required data.
