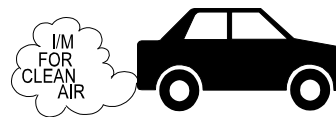


UTAH COUNTY TECHNICAL BULLETIN
2000-3



ANALYZER UPDATE

Software version 1.16 has been conditionally certified for use in the stations. There are still some bugs in this software but it is usable. Updates are pending.

OBDII QUESTION

Before the OBDII test is started there is a yes/no question you must answer. "Is MIL on with key on?". To answer this question you must turn the key to the "on" position without starting the engine. Look at the dash to see if a "MIL", "check engine", "engine", or similar light illuminates. The light may come on for several seconds and go off, or the light may come on and stay on until the engine is started. In either instance you would enter "Y" to the above question. If there is no MIL type light you would answer "N" to the above question. **If you enter "N" to this question you are declaring that the bulb or system is not functioning properly and the vehicle will fail the test.** The analyzer will still scan the computer for trouble codes and readiness status but the test result will be "failed OBD".

ANALYZER HARDWARE

The UTAH2000 analyzer hardware configuration may not be altered from the original design without prior approval from this department. Unauthorized modifications may result in analyzer lockouts until original configuration has been restored. Requests for modification must be submitted in writing.

HOSE LENGTHS

The analyzers were originally certified with 25' sample hoses. Several station owners have requested permission to extend the hose length in order to accommodate large vehicles or test bay layout. After studying the effect longer hoses may have on test results we have approved the use of longer hoses as long as they meet the following specifications.

1. Sample hoses may not exceed 40 feet.
2. Sample hoses must be constructed of the original type material.(non-reactive, crush resistant, kink resistant, etc.)
3. Sample hoses must have crimped-on threaded ends.
4. Sample hoses must pass audit checks.(response=no more than 8 seconds to 90% of values)
5. Sample hoses **may not** be cut and spliced.

18 MONTH NO LONGER APPLIES

Under the new ordinance that went into effect March 1, 2000 stations are no longer required to keep copies of Certificates or VIR's for 18 months. Old records may be discarded.

DCF CALCULATIONS

Included in the BAR97 analyzer specification is DCF (Dilution Correction Factor). The DCF applies a formula to the exhaust gas readings to compensate for dilution, intentional or unintentional, such as engine vacuum leaks, exhaust leaks, air system dilution, etc. According to EPA, Sierra Research and BAR this results in a more accurate exhaust gas reading. However, because the UTAH91 analyzer did not use this DCF the readings in manual mode will not be the same as the test results from the UTAH2000 analyzer. Depending on several factors the readings may be very different. The DCF may not be turned off during the official emission test but may be turned off in the manual mode by selecting the DCF button. With the DCF turned off the two analyzers will read the same in manual mode.

SAFETY INSPECTION

Highway patrol has informed us that stations may use multiple certificate books simultaneously. One book may be entered into the analyzer and another book may be used for hand written certificates. Two separate reports must be filled out.

Note: After the April software update the analyzer should have the capability to generate the report for those vehicles inspected using the analyzer.

UTAH2000 QUICK TEST TIME

The UTAH2000 analyzer uses an EPA approved and BAR certified two speed idle test procedure. This is a very quick test procedure. For this procedure to work properly the vehicle **MUST** be at operating temperature. Temperature has always been important but now it is crucial. Do not test the vehicle until you are sure the engine and catalytic converter are at operating temperature. The penalty for failing a passing vehicle is the same as for passing a failing vehicle.

ANALYZER MANUAL

If you have questions regarding your analyzer, check your ESP operator's manual first. If the manual doesn't answer your question then call ESP or our office.

TECH TIP # VE0030

Where's the OBDII Diagnostic Link Connector? If you've had trouble locating the DLC on some vehicles, you're not alone. Manufacturers are required to place the DLC in an easily accessible location but the DLC is not required to be in plain view. Some manufacturers (especially Asian manufacturers) have chosen to hide their connectors behind removable cover plates or behind ash trays. Generally the DLC is located under the dash near the steering column. However we have found several connectors hidden in center consoles with one located at the back of the center console almost in the back seat area (AUDI). One of the most helpful tools in locating DLC's is your *Mitchell Emission Control Application Guide*. Pages 13-28 in the 1999 edition and Pages 14-31 in the 2000 edition explain where the DLC's are located in foreign and domestic vehicles. Search this information first, If you still can not locate it call our office. We may be able to help you. As you test more and more OBD cars you will learn where different manufacturers "hide" their DLC's.