Leak Monitoring System Operations

Programming

The system must be programmed by a factory trained technician or by the direction of a factory representative. The following parameters will be programmed (but not limited to this list).

- System type of test - Vacuum
- Test target to start a test - 8 inHG
- Test duration - 1 Hour Increments
- Maximum loss (inHG) to fail a test - 2 inHG
- Number of failed tests in a row to activate an alarm - 3 Failed Attempts
- Number of failed attempts to start a test to activate an alarm - 1 Failed Attempt
- Alarm will disable the fuel pump

Automatic Operating

The system is designed to run only in the automatic test mode. The system monitors and controls the test media (vacuum) for the maximum loss for a programmed length of time. When testing, the system will perform the following:

- Prepare for the test
  - The vacuum pump will start
  - The system will stabilize before starting a test
  - The system will start a test when the test media is stable
  - The system will monitor the media for changes and either pass or fail a test based on the results
- The results of the test
  - The system will Log the results of a passed or failed test
  - Activate the alarm and send a signal to a BMS as programmed. If the alarm is activated, press the *Alarm Acknowledge* button on the front cover to silence the alarm.
  - Disable the fuel pump(s)
- Types of system failure
  - If the secondary pipe is compromised, the system will lose vacuum and the alarm is activated.
  - If the primary pipe is compromised, fuel will leak into the secondary pipe and fill the liquid barrier which will activate the alarm.
  - Each pipe run shall have an isolation valve to determine the specific pipe that is leaking in the event of a leak condition.
- Automatically prepare for the next test as programmed