

Troubleshooting

Flow and Pressure Problems

Maintaining EPC calibration
Procedure: Zeroing flow and pressure sensors
Measuring flow rates
Interpreting flow meter measurements
A gas does not reach the setpoint pressure or flow
A gas exceeds the setpoint pressure or flow
The inlet pressure or flow fluctuates
The measured flow is not equal to the displayed flow

Signal Problems

Test plot

Method Problems

Method mismatch

Inlet Problems

The Split/Splitless Inlet

Procedure: Leak testing the gas plumbing
Procedure: Leak testing an EPC split/splitless inlet
Procedure: Leak testing a nonEPC split/splitless inlet
Procedure: Correcting leaks

The Purged Packed Inlet

Procedure: Leak testing the gas plumbing
Procedure: Leak testing an EPC purged packed inlet
Procedure: Leak testing a nonEPC purged packed inlet
Procedure: Correcting leaks
Procedure: Cleaning the inlet

The Cool On-Column Inlet

Cool on-column inlet hardware problems
The inlet cools very slowly
The inlet is unable to reach a temperature setpoint
The syringe needle bends during injections
Procedure: Leak testing a cool on-column inlet

Procedure: Correcting leaks

The Programmable Temperature Vaporization Inlet

Procedure: Leak testing the gas plumbing
Procedure: Leak testing the PTV inlet
Correcting leaks

The Volatiles Interface

Procedure: Leak testing the gas plumbing
Procedure: Leak testing the system
Procedure: Preparing the interface for a leak test
Procedure: Correcting leaks

The Pneumatics Control Module

Procedure: Leak testing the gas plumbing

Detector Problems

The Flame Ionization Detector

Conditions that prevent the detector from operating
Detector shutdown
Checkout Conditions and Chromatogram

The Thermal Conductivity Detector

Conditions that prevent the detector from operating
Correcting TCD performance problems
Procedure: Thermal cleaning
Checkout Conditions and Chromatogram

The Nitrogen-Phosphorus Detector

Conditions that prevent the NPD from operating
Checkout Conditions and Chromatogram

The Micro-Cell Electron Capture Detector

Checkout Conditions and Chromatogram

The Flame Photometric Detector

Conditions that prevent the detector from operating
Procedure: Using the FPD
Flame ignition problems
Leak testing
Checkout Conditions and Chromatogram