Agilent 7890 GC - Quick Reference Guide

Using the 7890 Service Mode Inlet Leak Check

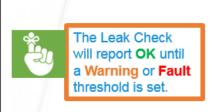
- For the Split/Splitless (SS), Multimode (MMI) and Programmable Temperature Vaporization (PTV) Inlets
- Used to evalute the leak rate, and help identify the source of leaks in these Inlet Systems
- Useful for leaks > 2-3 ml/minute

Service Mode

```
SERVICE MODE
Diagnostics
Front inlet leak check
Front inlet trap check
```

Entire Leak Check Menu:

```
FRONT INLET LEAK CHECK
TotalFlow
            55.39
                    Col
Test Inlet
                 (ON to Start)
                      20.0 psi
warning if check flow
                           OFF
                           OFF
Fault if check flow
      Last test Results
    Wed Oct 14 15:05 2015
Test flow OK:
                          80.8
Reset the test results?
                         (yes)<
```



To Run the Test:

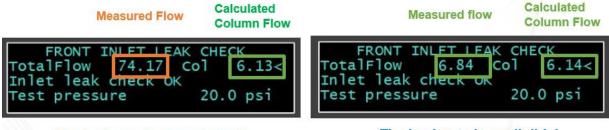
- 1 Confirm the accuracy of the Capillary Column Configuration
- 2 Select a Test Pressure Typical Examples:
 - For 30M X 250um on GCMS 5-20 PSIG
 - For 30m X 530uM column on GC Detector − 5-15 PSIG
 - For 30M X 320 uM column on GC Detector 5-25 PSIG
 - For 30M X 200uM column on GC Detector 5-85 PSIG
- 3 Press "ON" to start the Leak Check



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Interpreting the Results:

Compare the measured "Total Flow" to the calculated "Column Flow"



The Leak rate is approximately 74-6 ≈ 68 mL/minute

The Leak rate is negligible!

Potential Leak Points:

Check/Adjust/Tighten these areas while monitoring the Total Flow in the Display:



Applications for the Test

- Before and After Inlet Maintnence
- As a Pre-Run Check before running a sequence
- As a daily check for leaks
- As a Check for Plugged Column "Total Flow" result will be close to 0.0 ml/minute

Setting Warnings and Faults

