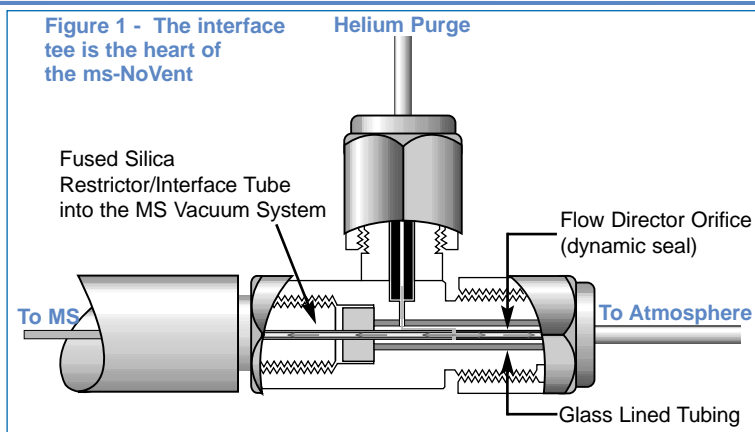


A56 ms-NoVent™ Replacement Parts

ms NoVent Replacement Parts*

5 minute GC/MS Column Changeover

- Change GC columns without venting the MS
- Isolates MS while the GC column is being changed
- Prevents air from entering the MS by using an innovative helium purge system
- Restricts gas flow into the MS using a restricted transfer line specific to the MS pumping system
- Improves MS productivity
- Reduce MS downtime
- Available for Agilent, Varian and Shimadzu systems



The ms-NoVent allows a capillary column to be changed without venting the MS and the mass spectrometer can be operational almost immediately. The ms-NoVent prevents air and water from entering the MS during column change-over. The key to the ms-NoVent is the unique Flow Director Orifice and deactivated fused silica interface tube, which are located at the MS inter face as part of the ms-NoVent Tee.

Before the column is removed from the interface, a helium purge is turned on. The fused silica restrictor/interface tube limits the flow of helium into the mass spectrometer. As shown in Figure 1, after the column has been removed from the ms-NoVent Tee, the Flow Director Orifice prevents air from entering the mass spectrometer. Thus, the flow of helium through the orifice acts as a dynamic seal preventing air being sucked back into the MS.

Normal Operation Mode

In normal operation mode the Helium purge is turned off. The column flow is directed through to the MS via the fused silica transfer tube. (See Figure 2)

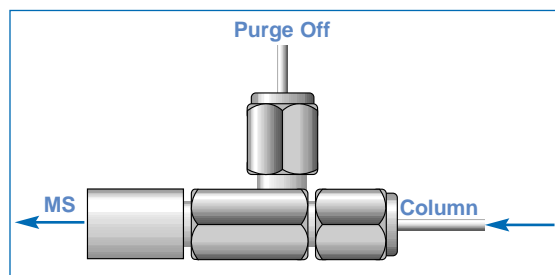


Figure 2 - Normal Operation Mode

Column Change Mode

In the column change mode a Helium purge is applied to the Interface Tee. the column can then be disconnected without shutting down or 'venting' the MS. The existing column, or a new column, can then be connected and the ms-NoVent switched back to normal mode for standard operation. (See Figure 3)

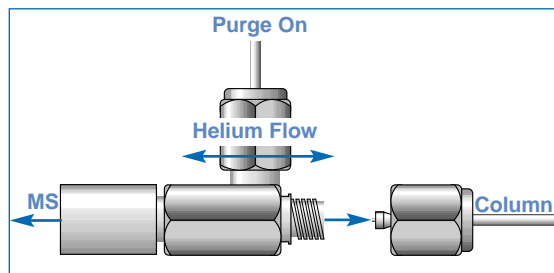


Figure 3 - Column Change Mode

*See Page D8 for MS NoVent II System

Part No.	Description	Pack Size	Price
Ms- NoVent™ MS Restrictors and Adaptor			
Agilent Technologies - Adaptor not required			
113405	Agilent 5970	2 Restrictors	
113407	Agilent 5971/5972	2 Restrictors	
113409	Agilent 5973	2 Restrictors	
113408	Agilent GCD	2 Restrictors	
113424	Agilent 5988A	2 Restrictors	
113422	Agilent 5989	2 Restrictors	
Perkin Elmer			
113435	Turbomass/Gold	2 Restrictors	
Shimadzu			
113411	MS 5000/5050 (Standard Interface)	2 Restrictors	
113429	MS 5000/5050 (WIF - wide borer interface)	2 Restrictors	
Thermo			
113419	Thermo GCQ	2 Restrictors & 1 Adaptor	
113420	Thermo GCQ	2 Restrictors	
113426	Thermo SSQ7000	2 Restrictors & 1 Adaptor	
113427	Thermo SSQ7000	2 Restrictors	
113433	Thermo Voyager	2 Restrictors & 1 Adaptor	
113434	Thermo Voyager	2 Restrictors	
Varian			
113412	Varian Saturn 2000	2 Restrictors & 1 Adaptor	
113413	Varian Saturn 2000	2 Restrictors	
113414	Varian Saturn 1,2 & 3	2 Restrictors & 1 Adaptor	
113416	Varian Saturn 1,2 & 3	2 Restrictors	
Replacement Parts			
113417	Stainless Steel Tubing (with rest.)	1 meter (1/16" O.D.)	
073200	SilTite™ Ferrules (0.1 - 0.25mm I.D. columns)	10 Ferrules & 2 Nuts	
073201	SilTite™ Ferrules (0.32 I.D. columns)	10 Ferrules & 2 Nuts	
073203	SilTite™ Ferrules (1/16" hole)	10 Ferrules & 2 Nuts	

*Instrument specific restrictor (and adaptor if applicable) is not included and must be ordered separately