

FEATURES

Replacing a DeTech Electron Multiplier in the Agilent 5973 MSD2-3

Replacing an electron multiplier can be successfully accomplished in just 15 minutes after the instrument is cooled down to the touch. All that is required are a pair of clean room gloves and the DeTech Model 2300 Electron Multiplier.

The Tradition Continues at ASMS

This year ASMS is in Montreal, Canada and SIS will be present there with a booth and our hospitality suite. We look forward to meeting many of you to discuss how we can better serve your instrument needs. A member of the SIS staff will be present at our booth during the day to discuss issues with you, distribute literature on new products and services available from SIS and distribute our new catalog. **Our booth number is 081.**

SIS Hospitality Suite at ASMS



Our hospitality suite will be open each evening from 7:30 to 10:30 pm. We plan once again to have our **Ice Cream Sundaes on Monday and Tuesday evenings**. This has become a tradition for SIS at this meeting. Our **Hospitality Suite is number 514C**. All are welcome. **DeTech**, the fastest growing manufacturer of mass spectrometer detectors, will be sharing our hospitality suite. They will once again be distributing their DeTech Mug - which has become a tradition for DeTech at this meeting. **The DeTech Mugs tend to go quickly, so stop by early.**

SIS 2003-2004 Catalog

The new SIS Scientific Supplies Catalog is now available. This new catalog includes a wide array of products for the service and maintenance of your mass spectrometers, gas chromatographs, liquid chromatographs and vacuum systems. **New products** include NIST 02, mass spectrometer source cleaning kits, an expanded line of MicroMesh abrasive products, and new SIS automated direct exposure probe - AUTOPROBE. **If you haven't received your copy give us a call or visit our WEB site and request your free copy.**



SIS Machine Shop Expands

SIS has made significant investments in the last 3 years in equipment and staffing in our machine shop to serve the scientific instrument market. The equipment includes the latest state-of-the-art CNC machining centers and mills. We have complete capabilities to aid you in your instrument and parts design, prototyping and manufacture. In addition SIS continues to expand its mass spectrometer parts repair services - which includes filament repair, flange repair, transfer line repair and the repair of other mass spectrometer parts and related instrument parts. **Stop by and see us at ASMS to discuss how our manufacturing and instrument repair capabilities can serve you.**

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Replacing an Electron Multiplier in the Agilent 5973 MSD

By Jay Ray - Detector Technology Inc.

Replacing an electron multiplier can be successfully accomplished in just 15 minutes after the instrument is cooled to the touch. All that is required are a pair of clean room gloves and the DeTech Model 2300 Electron Multiplier.

Step 1



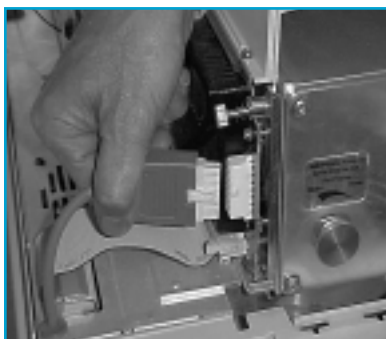
Remove the top cover of the Mass Spectrometer

Step 2



Vent the instrument. Make sure that all voltages applied to the multiplier and the conversion dynode are turned off prior to venting the system.

Step 3



Step 4



Remove power and computer cables from the Mass Spectrometer. Swing the Mass Spectrometer door open and locate the electron multiplier region.

Terms and Conditions

Scientific Instrument Services (S.I.S.) continues to supply "The Mass Spec Source" newsletter as a service to our customers. Printed four times a year, it includes articles and notes on new products and procedures of interest to mass spec and GC users. Papers from all fields of scientific inquiry in which mass spectrometry and gas chromatography can play a role will be considered and subject to review. However, S.I.S. reserves the right to reject any article that is in direct competition with S.I.S. products.

Articles and Application Notes

Editorials and reviews on new instrumentation and techniques for GC/MS will be considered for publication. These articles may be any length and our Graphics Department will aid you in any way you may need.

Mass Spec Tips

Any new ideas or tips that could benefit other mass spectroscopists can be submitted for inclusion in this section.

For More Information

Anyone interested in writing in any of the areas above should contact the editor of the Mass Spec Source, at (908) 788-5550. We are always trying to improve this newsletter, if you have any suggestions please give us a call. Thanks for your continued support.

Warranty

S.I.S. does not warranty that the items described herein are usable or fit for a particular purpose. Our company makes no representation as to condition or character of the merchandise. S.I.S. will not be responsible for consequential or special damages.

"The Mass Spec Source"

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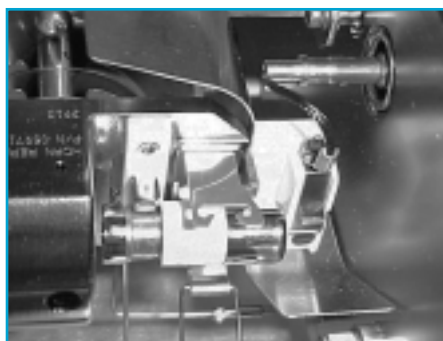
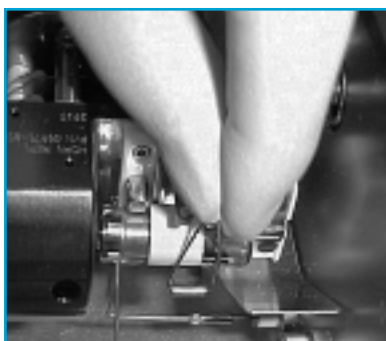
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Web: <http://www.sisweb.com>, E-mail: <http://www.sisweb.com/contact>

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Step 5



Put on a pair of clean room gloves. To remove the old multiplier, simply push together the mounting clips and allow them to open so you can gain access to the multiplier. Then reach and remove the existing multiplier from the manufacturer's mount.

Step 6

Take the DeTech Model 2300 and install it into the existing manufacturer's mount. Close the clips.

When installing the new DeTech Model 2300 make sure of the following:

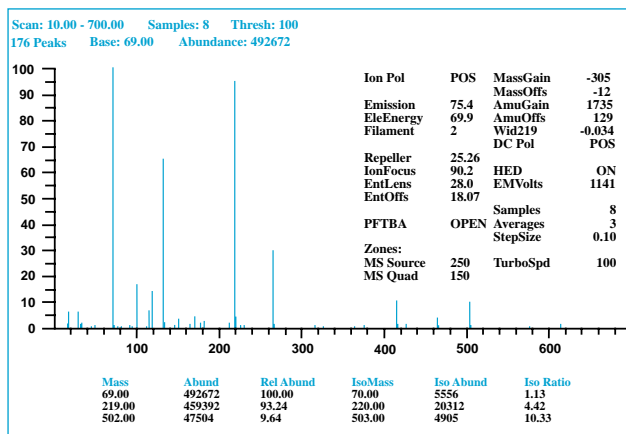
- 1) The Anode Pin (output) is making good contact with the output plate on the mounting frame.
- 2) The back arm of the spring clip is making contact with the electron multiplier's steel frame.



Close the Mass Spectrometer's door. Reconnect both the power and computer cables. Close the vent valve and replace the top cover.

Your installation is now complete. Turn on the vacuum pumps. Refer to your user's manual for pump time information.

Typical Autotune for DeTech Model 2300



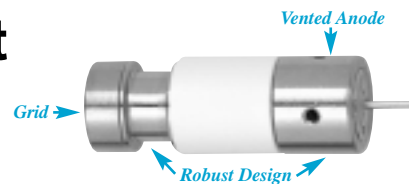
DeTech Model 2300 Plug-in Element for all Agilent Mass Spectrometers

Plug-In Multiplier Compatible With HP5971, HP5972, and HP5973

DeTech Model 2300 Performance Benefits

Vented Anode - These vent holes allow for residual gases in the detector channel and anode to be removed during pumping. By removing these gases the performance and life of the detector is improved.

Grid - When input ions enter the horn of a detector secondary electrons are created. These electrons should travel down the channel of the detector, but occasionally the secondary electrons travel out of the horn. Detector Technology Inc. has placed a grid on the horn causing all secondary electrons to travel down the detector channel. This increases the signal to noise ratio and the overall performance of the detector.



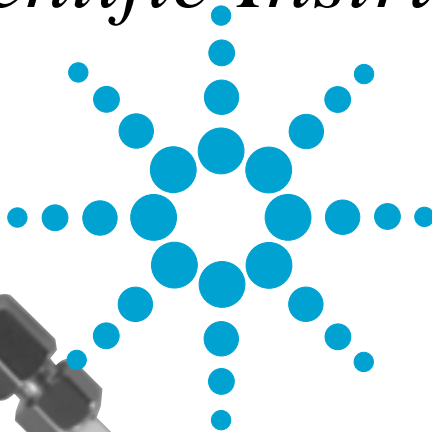
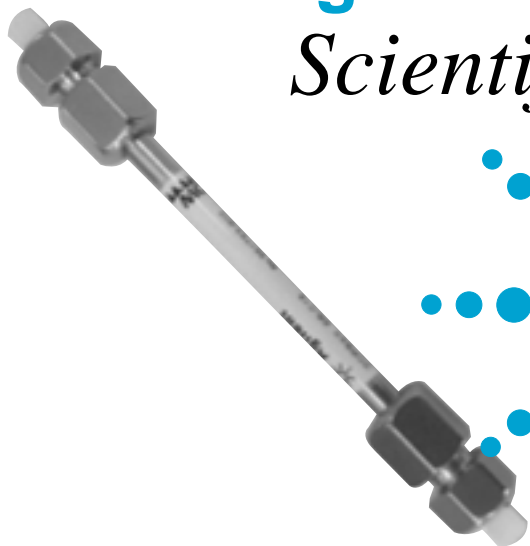
Lower Operating Voltage - The tuning voltage of Model 2300 is typically 1100V - 1300V. By starting detector operation at a lower voltage the overall lifetime is increased.

Increased Signal : Noise - When using model 2300 in an Agilent instrument the signal to noise ratio of the instrument is increased approximately 25%. This is due to the mechanical design changes incorporated into the product, as well as the optimized channel length.

Robust Design - DeTech Model 2300 has a robust stainless steel frame to protect the glass detector from damage.

Part No.	Description	Price ea.
2300	Replacement Horn Only for Agilent 5971/71A/72/73 MSD	\$550.00
2300KM	Replacement for K&M frame Large Horn	\$550.00

Special Limited Time Offer on Agilent LC Columns from *Scientific Instrument Services*



NEW

3.0-mm I.D. ZORBAX Solvent Saver and Solvent Saver Plus columns are available at half price!

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- Choose one of the ZORBAX 3.0mm I.D. columns listed and place your order by July 31, 2003, to take advantage of this special offer
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Phone: (908) 788-5550
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Column Description	Size (mm)	Particle Size (µm)	Agilent Part No.	Special Introductory Price
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StableBond-CN	3.0 x 100	3.5	861954-305	\$220.00
StableBond-C3	3.0 x 150	3.5	863954-309	\$245.00
StableBond-C3	3.0 x 100	3.5	861954-309	\$220.00
StableBond-Phenyl	3.0 x 100	3.5	861954-312	\$220.00
StableBond-Aq	3.0 x 250	5.0	880975-314	\$245.00
StableBond-Aq	3.0 x 150	5.0	883975-314	\$220.00
StableBond-Aq	3.0 x 150	3.5	883954-314	\$245.00
StableBond-Aq	3.0 x 100	3.5	861954-314	\$220.00
Eclipse XDB-C18	3.0 x 100	3.5	961967-302	\$220.00
Eclipse XDB-C8	3.0 x 100	3.5	961967-306	\$220.00
Eclipse XDB-Phenyl	3.0 x 100	3.5	961967-312	\$220.00
Bonus-RP	3.0 x 250	5.0	880668-301	\$245.00
Bonus-RP	3.0 x 150	5.0	883668-301	\$220.00
Bonus-RP	3.0 x 150	3.5	863668-301	\$245.00
Bonus-RP	3.0 x 100	3.5	864668-301	\$220.00
Extend-C18	3.0 x 250	5.0	770450-302	\$269.50
Extend-C18	3.0 x 150	5.0	773450-302	\$242.00
Extend-C18	3.0 x 100	3.5	764953-302	\$242.50
Rx-C18	3.0 x 150	3.5	863967-302	\$245.00
Rx-C18	3.0 x 100	3.5	861967-302	\$220.00
300Å Columns				
300StableBond-C18	3.0 x 150	3.5	863974-302	\$245.00
300StableBond-C3	3.0 x 150	3.5	863974-309	\$245.00

For a complete list of all Agilent Solvent Saver columns, visit our web site at:

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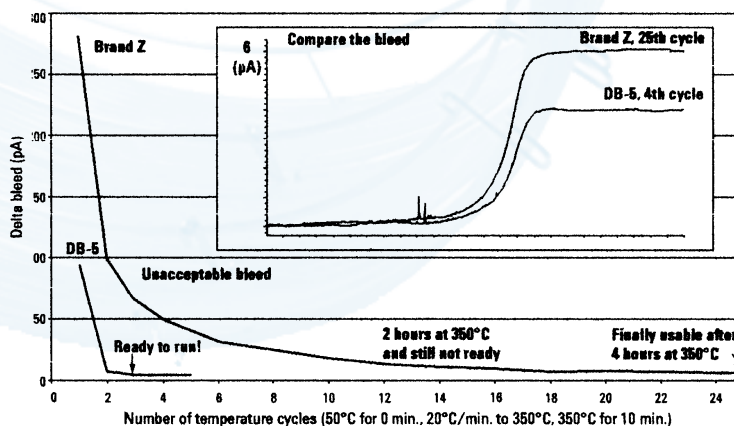


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Lowest Bleed, in the least time.

Agilent's MS-grade columns are specifically engineered for low bleed, high thermal stability and excellent inertness. All GC columns need to be conditioned when installed. Some manufacturers recommend conditioning times of four hours. Agilent recommends conditioning just until the baseline stabilizes. For most Agilent columns, this is one hour or less. Additionally, every Agilent GC column has been tested to ensure reproducible column-to-column performance



***Available While Supplies Last. One per Customer. Limited time offer. Not For Use With Other Promotional or Discount Offers. Offer Expires July 31, 2003**

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NIST 02

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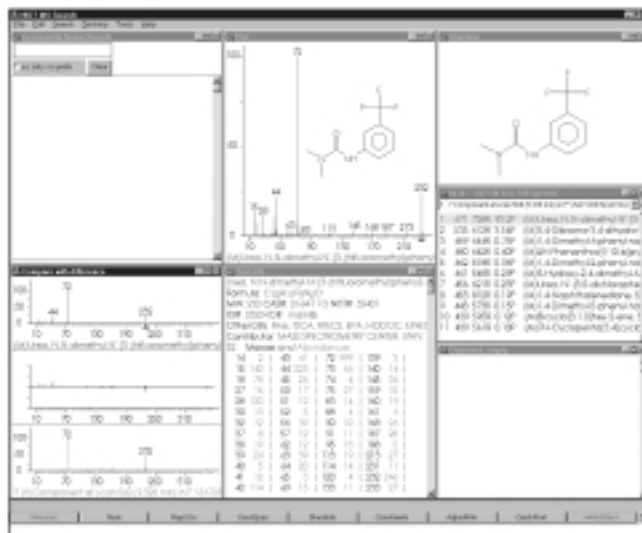
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<http://www.sisweb.com>



The S.I.S. Web Site is continually expanding.

- **MSLinks** - *expanded listings and reference materials*
- **Application Notes** - *on thermal desorption GC and GC/MS*

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