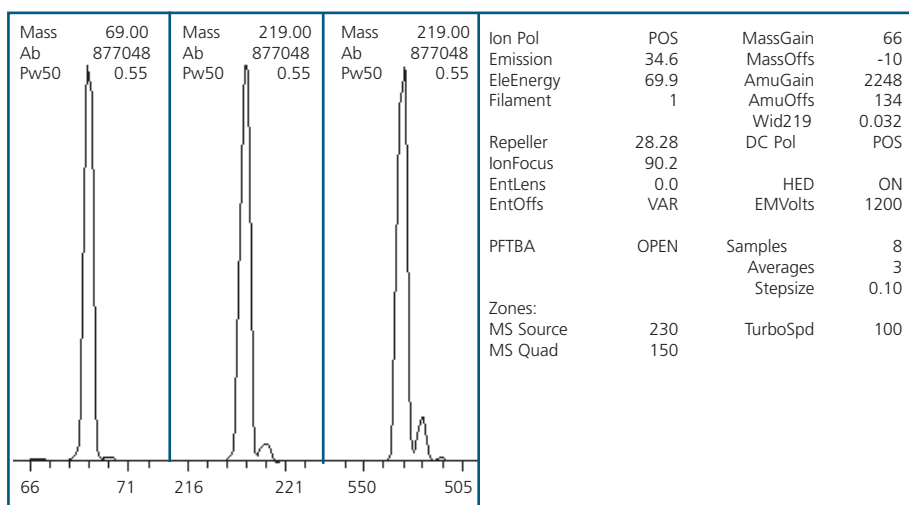


# ETP™ Electron Multiplier for the Agilent Technologies 5973 MSD

The Model 14617 detector has been specifically developed to retrofit the Agilent Technologies 5973 MSD. The detector incorporates a modular design to facilitate ease of replacement and additional innovations intended to enhance performance. First time installation requires the 14617 assembly which includes the mechanical housing and multiplier module. Subsequent replacements require only the 14616 multiplier module.

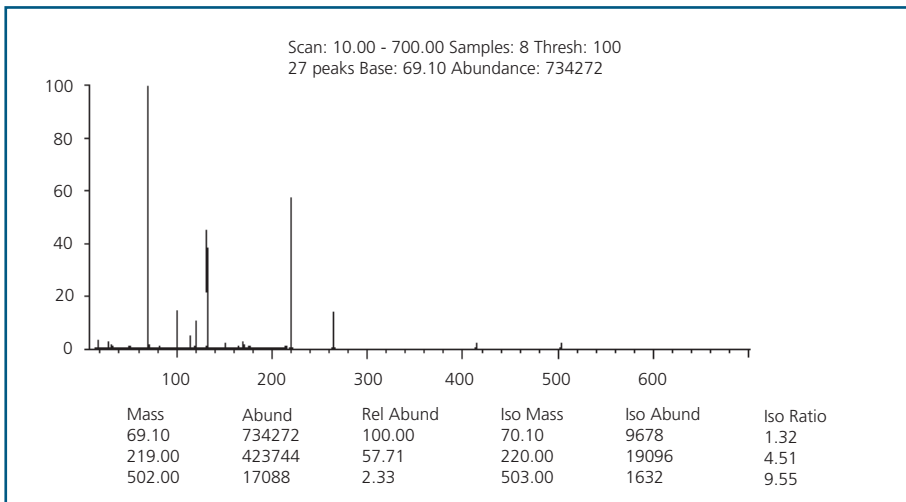
Typical test results with the 14617 exhibit a 50% enhancement in sensitivity and greater than 2 x improvement in linear response over the original detector.

The 14617 is designed to meet or exceed all instrument specifications in 5973 GC-MS systems for both EI and CI operation. The mounting assembly is guaranteed to be plug compatible with the instrument, and autotune functions will operate normally. Typical autotune characteristics are illustrated in the figures opposite.



All ETP™ Electron Multipliers from SGE have been developed to exhibit:

- Unsurpassed sensitivity
- Unrivalled linearity and dynamic range
- Uncompromised ease of installation
- Unequaled operational lifetime



TARGET MASS:	50	69	131	219	414	502
DYNAMIC ENT OFFSET:	18.8	16.6	15.6	16.8	18.1	19.6
TARGET ABUND (%):	1.0	100.0	45.0	55.0	2.4	2.0
ACTUAL TIME ABUND (%):	1.1	100.0	45.0	57.7	2.7	2.3

HP 5973 MSD Autotune Report

## ORDERING INFORMATION

Part No.	Description
14617*	Multiplier + mount
14616	Multiplier Only

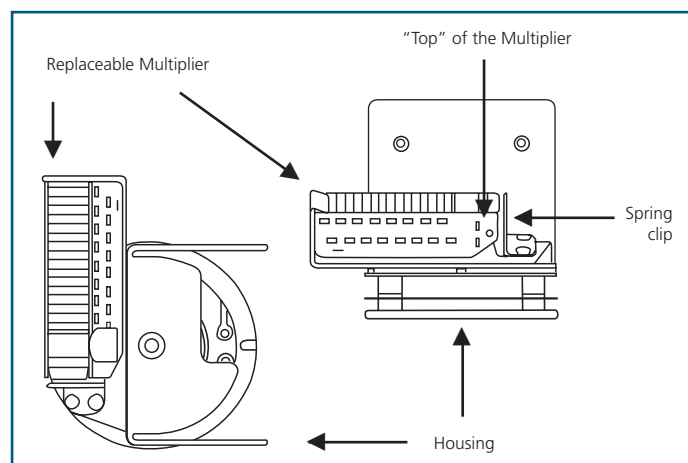
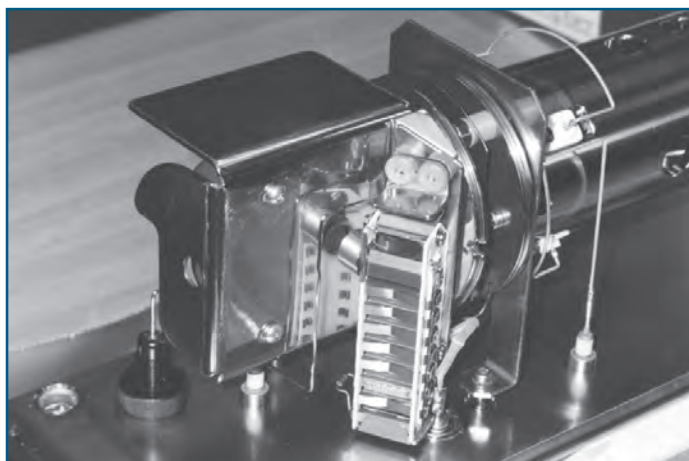
\* First time installation

## Installation of the 14617 Detector in your Agilent Technologies 5973 MSD

First time installation of the 14617 assembly is simple and should take only about 20 minutes. Subsequent detector module replacements are done in seconds. Refer to the photograph and diagrams below for proper orientation in the instrument.

1. Vent and cool the mass spectrometer according to instructions provided with the instrument.
2. Open the analyzer housing and detach from the main instrument housing. Set the analyzer housing on a clean, unobstructed workspace.
3. Disconnect the four electrical leads from the feedthrough terminals (HED, EM high voltage, Ion Focus Lens, and Signal).
4. Remove the two screws holding the detector assembly to the analyzer using the appropriate ball-driver supplied in the instrument tool kit. Save the mounting screws, as they will be used to install the 14617.

5. Remove the 14617 detector from the original package.
6. Remove the multiplier module prior to installing the mounting assembly. This is accomplished by grasping the module by the "top" (refer to the diagram below) and gently pulling. If resistance is encountered, push up gently on the spring clip holding the multiplier module.
7. Install the mounting assembly by passing the two mounting screws through the holes in the mounting plate and then using the ball-driver to tighten. Do not over tighten the screws.
8. Connect the electrical leads to the appropriate feedthroughs.
9. Reinsert the multiplier module by reversing the procedure described in step 6 above.
10. Reinstall the analyzer housing in the instrument and begin the pump down procedure.



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