

3M™ Forensics Vacuum

A portable, high-efficiency vacuum system for trace evidence collection, identification and retention

The 3M™ Forensics Vacuum is an extremely powerful unit designed for high-efficiency collection of particulate evidence that meets most law enforcement needs. The advanced safety features of this portable vacuum, along with its single-use disposable filters, make evidence collection easy, convenient and safe.

The 3M Forensics Vacuum is the efficient, user-friendly choice for collecting and retaining extremely small particles.

How the 3M Forensics Vacuum Works

To help ensure that collected evidence remains pristine and uncontaminated, the system utilizes a specially designed, single-use, disposable filter. The filter is assembled and packaged in an evidence bag. The filter and bag are then inserted into a heat-sealed poly bag to prevent tampering. Double sealing of the filter in an evidence bag, followed by a poly bag, means it is only exposed to evidence collected at the crime scene at the time of use. After the filter has been used, it is then removed from the vacuum hose, capped front and back, and placed in a supplied evidence bag.

The filter (housing and media) is intended for one-time use only to help ensure evidence integrity. It should never be cleaned and reused.

Specifications

3M Forensics Vacuum, Model 497AJW

Electrical	115 VAC
	50/60 Hz
	6.0 amps
Motor	Thermally protected with automatic reset. 3 Year Warranty
Dimensions	Length 17.80" (45.2 cm)
	Width 7.75" (19.7 cm)
	Height 9.25" (23.5 cm)
	Weight 9 lbs 14 oz.
Certification	UL Listed
Ordering Information	Vacuum Part #A-6510
	Filter Part #A-6512

Note: Vacuum and filter ordered separately.



The complete Forensics Vacuum from 3M.

- 1 - Roomy storage compartment for attachments.** Attachments and power cord are easily stored inside the cover and held securely in place with an internal door.
- 2 - Stretch hose.** Long enough to reach without lifting the vacuum, yet compact for easy storage.
- 3 - Two durable latches.** Two sturdy latches keep the lid on tight and the attachments inside during transit.
- 4 - Disposable** single-use sealed filter.
- 5 - End caps** for front and back of filter to protect trace evidence collected.
- 6 - Disposable** single-use evidence bag.
- 7 - Detachable** 15 ft. power cord (not shown).

How 3M™ Forensic Vacuum Filters Trap Fine Particles

Special Filter Design Reduces Blow-By and Increases Retention

Very few filters retain all particles they collect. As a result, particles are discharged into the air, an occurrence known as blow-by. Fiber diameter, along with the surface area of media in filters, determines particle retention and suction capability. If fibers are too thick and the weave too coarse, air flow and particle retention are diminished.

The photomicrographs shown below clearly illustrate the superior weave of the 3M filter as compared to that of a conventional filter. The effective design of the 3M filter increases its ability to trap all types of evidence and virtually eliminates blow-by and loss of contents. In fact, 3M Forensics Vacuum filters perform so effectively, their efficiency rating is over 97% with retention of particles as small as .1 micron in size.

The 3M Forensics Vacuum filter and evidence bag are designed specifically for evidence collection. The filter is sealed from the factory and comes complete with everything you need to process collected evidence, including an evidence bag, filter caps and a sealed, tamper-resistant filter unit which helps ensure non-contaminated evidence is received in your laboratory.

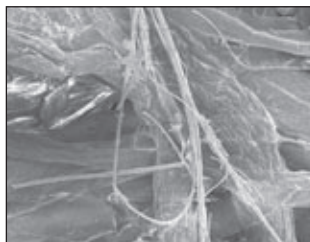
The filter is compatible with vacuum hoses that have an outside diameter of 1.19" - 1.25".



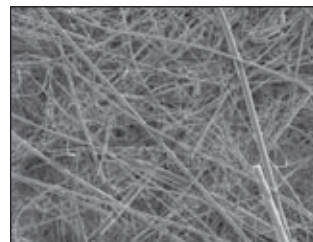
Factory sealed special filter shown with caps that helps ensure no loss of collected evidence.

The 3M™ Filter and Evidence Bag are sealed in their own plastic bag to prevent contamination before use.

Once the evidence is collected, the filter is capped and sealed in the evidence bag.



Photomicrograph of the fiber weave of a conventional filter media (500x)



Photomicrograph of the fiber weave of a 3M™ Filter media (500x)

Important Notice

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