

# TECHNICAL INFORMATION

Rechargeable Evidence Vacuum Sweeper Kit Catalog Nos. 620REK, 620REK220

	The collection of dry microparticle trace evidence such as hair, fibers, soil particles, pollen, etc.
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# INTRODUCTION

The 620RE Evidence Vacuum is for the collection of *dry* microparticle trace evidence such as hair, fibers, soil particles, pollen, etc. Do not attempt to collect wet samples as the moisture may damage the electric motor.

The 619E1 filters, used on this vacuum and the 619E, offer one-time use to prevent any possibility of contamination from one area to another. These filters are sealed at the factory. The seals must not be disturbed before or after evidence is collected. These seals may be broken only by the laboratory technician examining the evidence.



# Hazards/Safety Info

**Caution!** This device is not to be used for evidence collection without the 619E1 in place.

# Warnings

- This device is for dry vacuuming only—vacuuming liquids may result in damage to the motor.
- This vacuum motor may create unshielded sparks. Do not use this vacuum in explosive atmospheres.

**Note:** The trace evidence filter assembly is intended for one use only. *Do not reuse this filter.* Reuse will result in cross contamination of evidence.

## **OPERATIONS**

The ON/OFF switch must be in the OFF/CHARGE position to charge. The unit will not charge if the switch is in the ON position. *NOTE: Before first use, charge the unit for at least 12 hours.* 

# Getting Started

Before using the 620REK the first time, the batteries must be charged.

- 1. Make sure the ON/OFF switch is in the OFF position.
- 2. Place the vacuum on a flat surface near an outlet.
- 3. Place vacuum on charging bracket.
- 4. Plug the adapter into the wall socket.
- 5. For the initial charge, allow the vacuum to charge for 12 hours.

# Attaching Filter Assembly

- 1. Remove red cap from both ends of 619E1 filter assembly.
- 2. Place circular end onto the male tube extending from the vacuum body.

Note: Filter should be firmly connected to the body so it will not drop off when using vertically.

Place crevice tool on opposite end of the filter assembly. The unit is now ready to collect evidence.

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### **USE OF THE SWEEPER**

# Floor Areas

It is recommended that large areas of floor or carpet be done in sections. If too large an area (or a very dirty area) is attempted, the filter will become clogged with debris and the effectiveness of the vacuum will be impaired. The filter should be replaced before it gets clogged. Some judgement is required, but it is suggested that a 10 ft. x 12 ft. carpet, for example, should be divided into quarters and a fresh filter should be used for each quarter.

# **Furniture**

Chairs, couches, etc. have exposed areas and concealed crevices. These should be done in two separate steps. First, sweep the exposed surfaces. Then replace the filter and collect debris from the hidden areas. Use fresh filters for each piece of furniture. The arms and backs of furniture are important areas to search since hairs from the arms and head will be found in these locations.

# SECURING FOR TRANSPORTATION

Leave the vacuum motor running and point the filter nozzle straight up into the air (this will prevent the loss of evidence within the crevice tool). Turn the vacuum motor off. Remove the crevice tool from the filter assembly and place a red cap on the open end. Remove the filter assembly from the vacuum body and place a second red cap on the open end.

Fill out the data requested on the preprinted evidence collection bag. Insert the whole filter assembly into

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the evidence collection bag and seal it in accordance with the instructions enclosed with the filter. **Note:**The filter assembly should be removed from the vacuum, sealed in an evidence bag, and shipped whole and unopened to the lab. A fresh filter must be used for each item or area vacuumed.

# CARE AND MAINTENANCE

The unit should be cleaned after each search to prevent evidence contamination. The surface can be cleaned using damp cloth. Care should be taken not to get water into the interior of the vacuum, as this will damage the motor.

#### 620REK CONTENTS:

- 1- 620RE Rechargeable Vacuum
- 1- Filter Adapter
- 1- 620REC 110V AC (or 220V) Recharge Unit
- 2- 619E1 Filter Assemblies, Hermetically Sealed
- 1- 620RE1 Molded Copolymer Carrying Case with Machined Foam Inserts

TROUBLESHOOTING			
Problem	Possible Causes	Solution	
Vacuum will not turn ON	Unit isn't charged	Charge unit for 12 hours and retry	
	Power switch isn't turned on	Push switch to ON	
	Note: If unit still won't turn on, return for repair		
Vacuum will not pick up evidence	A blockage may have occurred in crevice tool	Remove crevice tool and clear	
	Filter assembly may be full	Replace filter assembly	