

Work Instruction

Gel-Pak Vacuum Release™ (VR Series) Tray are “pocketless” carriers which hold devices securely in place during shipping or handling, and offer the unique ability to release the devices on demand for unloading. Use the recommended process parameters and procedures below for best device handling results.

Section 1: General notes

The Vacuum Release technology relies on temporarily changing the surface contact area between the device and the VR tray elastic Gel membrane placed over a mesh material. This change in surface contact directly affects the magnitude of the Gel holding force.

In the normal “**Hold Mode**” (*Figure 1*), the surface contact is maximized and devices are held firmly in place for shipping, handling, and storage.

In the temporary “**Release Mode**” (*Figure 2*), the surface contact is minimized by applying vacuum thru a hole in the underside of the tray which causes the Gel membrane to conform to the shape of the mesh. This reduces the holding force between the Gel and device (fewer points of contact) which allows for easy device removal using a vacuum pick-up tool.

Once vacuum is removed, the elastic Gel membrane returns back to its original position and securely hold the remaining devices. The VR trays are reusable therefore this Hold and Release process can be done repeatedly on the same VR tray.

Please note that applying vacuum to underside of tray is only required during the actual device unloading process. Vacuum is not used when loading devices on Gel surface.

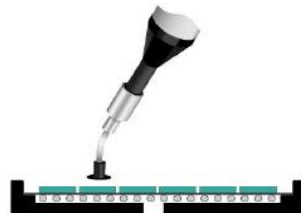


Figure 1: Hold Mode



Figure 2: Release Mode

Section 2: Components

Gel pack assembled



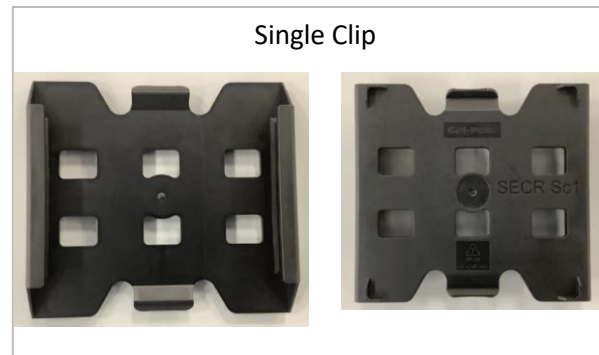
Cond Tray



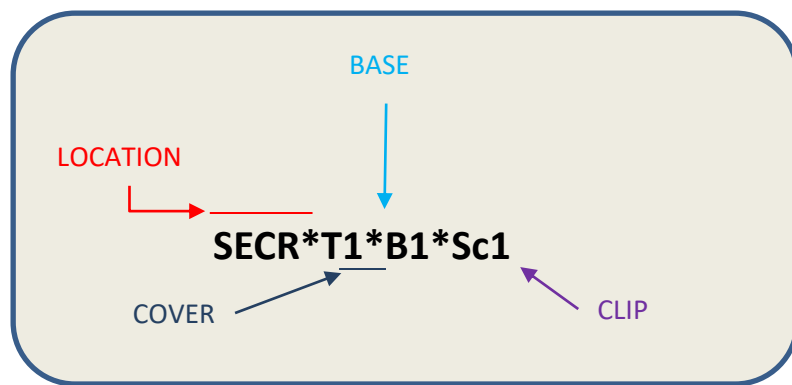
Cover Tray



Single Clip

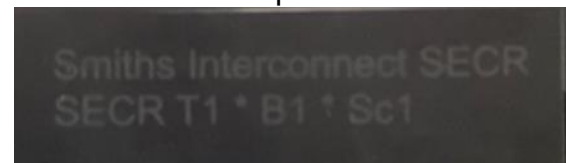


Section 3: Identification



It is crucial to confirm that the assembled corresponds to the 3 components identification.

Tapa



The location (SECR) is combined with the cover's (*T_) and base's (*B_) and fastener's (*Sc_) numbers in the cover's upper portion.

Base



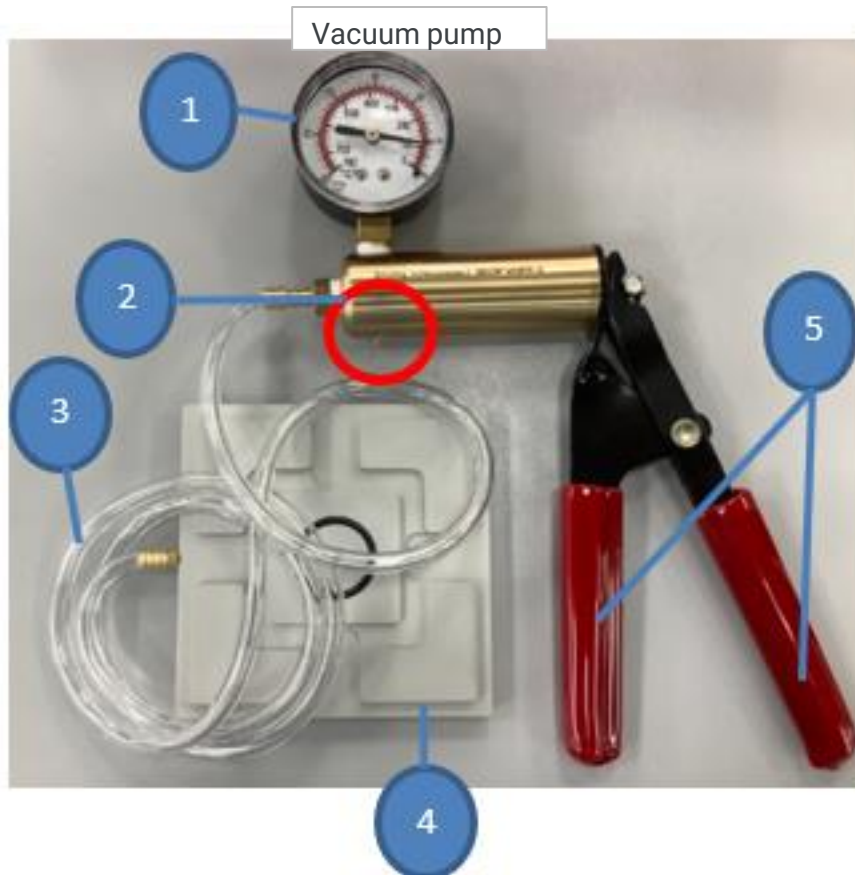
The base number (*B_) appears on the back.

Sujetador



Bra number (*Sc_) is printed on the back.

Section 4: Vacuum Pump Components



- 1- Manometer (in.Hg).
- 2-Pin to eliminate the vacuum.
- 3-Duct for air flow.
- 4-Vacuum plate.
- 5-Hand hold.

Section 5: Packing method

1. Remove the cover from the vacuum tray by sliding the Clip.



2. Take the component and set it on the vacuum tray using non-metallic tweezers

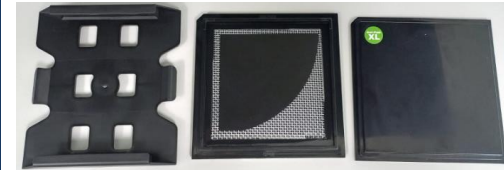


3. Replace the cover, then, slide the clip until the parts are once again assembled



Section 6: Unpack

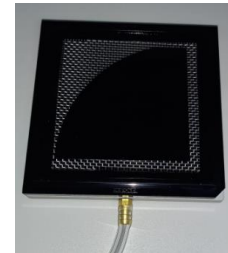
1. Remove the cover from the vacuum tray by sliding the Clip.



2. Place the VR Tray on a Vacuum Plate



3. Make sure the Tray is aligned with the vacuum plate o-ring to obtain a tight backside seal and hold vacuum.

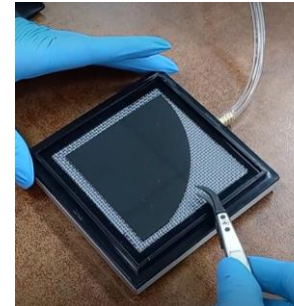


Section 6: Unpack

4. Apply 15 " Hg of vacuum (as reference). This will put the VR Tray into "Release Mode" and allow devices to be easily unloaded.



5. While in "Release Mode," carefully remove the devices using non-metallic tweezers



6. After removing the selected devices from the Gel surface, release the vacuum. (Press the pin as shown in photo to remove vacuum)



Section 6: Unpack

7. Place the Lid and Clip back on the VR Tray and store for future use. Note: Trays are reusable.



Change Log

Rev	Change description	Created by	Date
A	New released	Kenneth Granados/ Bryan Barrientos	08/29/23