

**ADJUST-A-VAC™ VACUUM TWEEZER**  
**Product Numbers: 522-10 and 522-11**



Figure 1: Adjust-A-Vac™ and Accessories

**DESCRIPTION**

The Adjust-A-Vac™ Vacuum Pick-Up Tool is an ESD and Cleanroom 10 safe vacuum tweezer system. With vacuum of up to 8” Hg at sea level, and variable vacuum level this system is ideal for handling delicate items with smooth surfaces such as grids and semiconductors. The unit comes with all the items needed for use including hose, vacuum pen and 9 vacuum tips. There are 5 pins on top of the device for vacuum tip storage.

**INCLUDED ITEMS**

- 5 feet of 2.5mm coiled ESD Safe vacuum hose. Hose color may vary.
- A set of nine vacuum tips
  - Five bent probes in ½” (12.70mm) length with 3/32” (2.38mm) , 1/8” (3.18mm), 3/16”(4.76mm), 1/4” (6.35mm), 3/8” (9.53mm) diameter static dissipative Buna-N Cups
  - Four straight probes in ½” (12.70mm) length with 1/8” (3.18mm), 1/4” (6.35mm), 3/8” (9.53mm), 1/2” (12.70mm) diameter static dissipative Buna-N Cups
- Five vacuum tip holders on top of tool
- A control knob to reduce vacuum level to pick up tip
- A push button vacuum pen
- Bar LED graph power-on and vacuum-level indicator
- Rubber no-skid feet
- ESD ground connection is by three wire power cord

## SPECIFICATIONS

**VACUUM:** Up to 8 inches of mercury at sea level.

### DIMENSIONS:

<b>Length</b>	<b>Height</b>	<b>Width</b>
8" (203 mm)	3" (76 mm)	3.5" (89 mm)

**WEIGHT:** 2.84 lb (1288.2 g)

### POWER REQUIREMENTS:

Model No. 522-10	110 VAC	50/60 Hz	4 W
Model No. 522-11	220 VAC	50/60 Hz	4 W

## USING THE ADJUST-A-VAC

1. Ensure that the replaceable filter housing has a filter installed and is snugly tightened to ensure no vacuum leaks. Turning the housing clockwise tightens it.

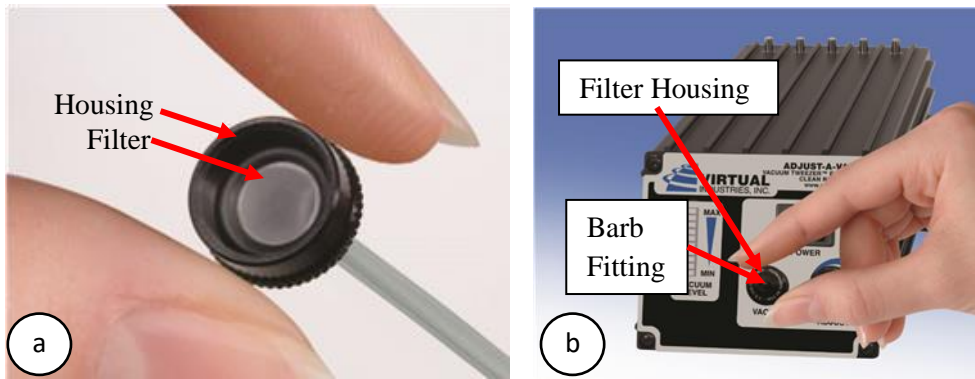


Figure 2: a) Filter Housing and Filter; b) Housing and Filter Installed on Adjust-A-Vac™

2. Connect one end of the vacuum hose to the barb fitting on the filter housing and the other end to the barb on the push button vacuum pen.
3. Select a probe with a vacuum cup that is slightly smaller in diameter than the outline of the parts you want to pick and place. Securely install it on the tapered end of the vacuum pen tip.
 

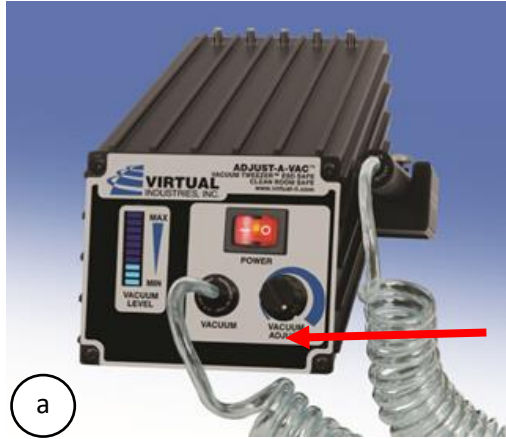
**NOTE: Selecting a vacuum cup that is too large or too small will result in improper operation.**
4. Connect the three-wire ADJUST-A-VAC™ power cord to input power. Turn the ON/OFF switch to the ON position. The LED vacuum level bar will glow at low brightness to show that power is on.



Figure 3: Adjust-A-Vac™ Connections and Controls

**5. To set the vacuum level for the parts you will be handling:**

- a. Rotate the VACUUM ADJUST knob fully counterclockwise to set the vacuum to the minimum level.
- b. Place the pick-up tip flat on the part you want to pick up. If the part is not grasped, rotate the VACUUM ADJUST knob clockwise until the part is grasped sufficiently for handling. The display bars will light up brightly to show the level of vacuum that is present. When using small part tips several of the bars may illuminate brightly due to the tiny orifice of the tip being used.
- c. Push the vacuum release button on the vacuum pen to release the part.



a



Vacuum Release Button

b

Figure 4: a) Vacuum Adjust Knob; b) Pick-up Pen Vacuum Release Button

**6. To pick and place a part:**

- a. Gently place the vacuum cup on the top of the part that you wish to pick up. The part should now be firmly grasped by the vacuum cup. The blue LED vacuum level bars will light up brightly to show the level of vacuum that is present.
- b. Move the part to where you want to place it.
- c. To release the part, simply depress the button on the vacuum pen with your finger. The part should now be released and the blue LED vacuum level bars will indicate the reduced vacuum level.

NOTE: When using small tips a partial level of vacuum will be displayed when the tip is installed.

**7. Remember to turn the unit OFF when you are finished.**

**OPTIONAL ACCESSORIES**

Product #52920: Set of five replacement 40 micron inlet filters

**CLEANING AND MAINTENANCE**

The Adjust-A-Vac™ is maintenance-free. Keep dry and lint-free. If necessary, use a dry, soft cloth to clean. Do not use harsh cleaners.

**SOURCE DOCUMENT**

Adjust-A-Vac™ AV-6000 Vacuum Tweezer – ESD Safe Cleanroom Safe and Class 10 Operating Instructions and Specifications, Virtual Industries, 08/10/2022

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