

**Care and Use of
V&P Handheld Magnetic Bead Separation Blocks
VP 771HH Series**

Microplate Clip Adjustment

The microplate clips on V&P's Handheld Magnetic Bead Separation Blocks are used to hold the microplates securely in place by sliding over the top of the microplate or the bottom skirt lip (Figure 1). Because microplates vary with regard to the height and shape of their bottom skirt lip, it may be necessary to adjust the height of the microplate clips using either one or both procedures below.

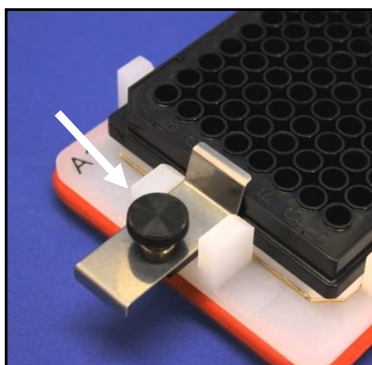


Figure 1. Microplate clip.

- A. **Adjustment of the microplate clip height.** This adjustment raises or lowers the entire clip assembly and may be needed when switching to a different microplate. It also affects how tightly the clips hold each microplate.

Using the provided 3/16" hex wrench

1. To raise the clip, adjust the set screw located on the bottom of the Block (Figure 2) in the clockwise direction.
2. To lower the clip, adjust the set screw located on the bottom of the Block (Figure 2) in the counterclockwise direction.

- B. **Loosening the microplate clip.** This adjustment affects how easily the microplate clip slides over the microplate skirt lip or top of microplate. Simply tighten the thumbscrew to prevent the clip from sliding or loosen to allow the clip to move (Figure 3).

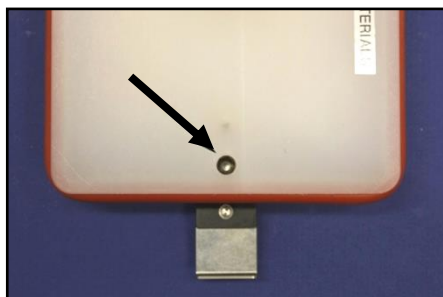


Figure 2. Bottom set screw.

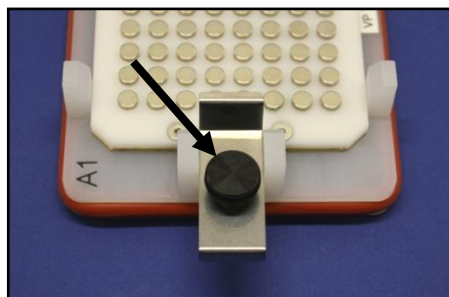


Figure 3. Clip thumbscrew.

Changing Microplate Clips

The V&P Handheld Magnetic Bead Separation Block is supplied with two microplate clip sizes, tall and short, to accommodate different microplates. To change between the two clips, unscrew the thumbscrew completely, lift off screw and small washer underneath, remove one clip and replace with the other.

Selection of clip to use depends on the microplate and the Handheld Magnetic Bead Separation Block version. For example, for VP 771HH-LF (24 round, flat post magnets) with an un-skirted PCR plate, use the taller clip to hold at the top of the plate (Figure 4a). For VP77HH-MC (6 bar magnets) and a 96 deep well plate, use the short clip to hold the plate at the lip of the skirt (Figure 4b).

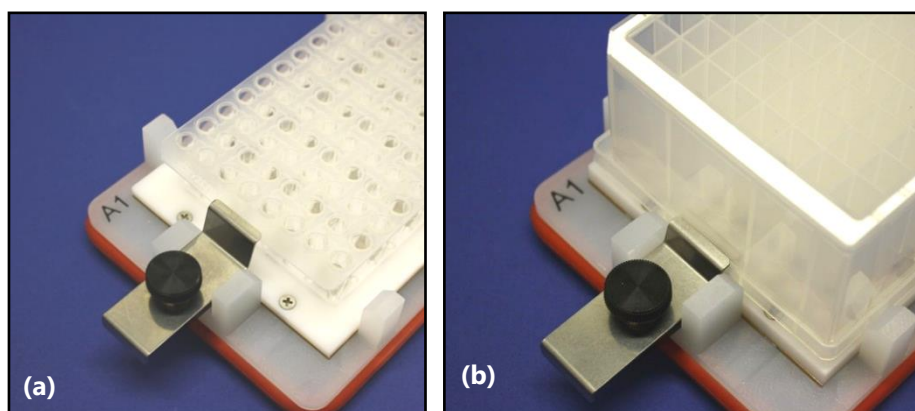


Figure 4. Microplate clip options. (a) Holding from top of plate with the tall clip. (b) Holding at plate skirt with the short clip.

Cleaning and Disinfecting

The Handheld Magnetic Bead Separation Blocks may be cleaned as follows:

Dried Aqueous Solutions:

1. Rinse with water and dry thoroughly with towels (paper or cloth). If possible, dry with forced air to eliminate as much water as possible. Follow with a brief wipe of surfaces with 60-90% isopropyl alcohol or 60-90% ethanol and dry thoroughly, preferably with forced ambient air.
2. If water does not clean the dried material adequately or a more thorough cleaning is desired, use a mild liquid detergent (e.g., Joy) diluted to 1:20 to 1:100 with water. Rinse thoroughly with water and then alcohol as described in Option 1 above.

Wet or Dried Infectious Agents, or Nucleic Acid:

1. Isopropyl alcohol and ethanol (either 60-90% in water) can also be used to disinfect the surfaces of the Magnetic Bead Separation Block. Allow the alcohol to be in contact with the surfaces for up to 1 minute. Follow by drying, preferably with forced ambient air.
2. For a more extensive cleaning or disinfection, dilute household bleach (5.25-6.15% hypochlorite) 1:10 with water.
 - a. Wet all exposed surfaces of the Magnetic Bead Separation Block with paper towels saturated with the diluted bleach. If infectious agents or nucleic acid are believed to be under the magnet frame holding the small magnets, and/or if more thorough disinfection is desired, remove the magnet frame assembly (includes steel plate and small magnets) from the handheld base. To accomplish this, unscrew the middle screw on each end of the magnet frame and lift the assembly away from the base. Wet the newly exposed areas with the bleach-saturated towels.
 - b. Allow the diluted bleach to be in contact with the Magnetic Bead Separation Block parts for a maximum of 5 minutes.
 - c. Rinse with water and treat with alcohol as described above in Option 1, Dried Aqueous Solutions.

Organic Solvents

1. Wipe solvent away with towels (paper or cloth) as soon as possible and wipe with 60-90% isopropyl alcohol or 60-90% ethanol. Dry thoroughly, preferably with forced ambient air.

Note: The Handheld Magnetic Bead Separation Block or any of its parts should never be submerged in any of the cleaning solutions described above.

Magnet Safety

The neodymium magnets in the V&P Magnetic Bead Separation Block are extremely strong and must be handled with care to avoid personal injury and damage to the magnets. Fingers and other body parts can get severely pinched between two attracting magnetic blocks or magnetic blocks and metal surfaces. Neodymium magnets are brittle, and can peel, crack or shatter if allowed to slam together. Metal tools such as screw drivers and scissors should be kept at a distance. Other sharps such as razor blades, scalpels, needles, and knives should never be near magnetic block. Eye protection should be worn when handling the magnetic block. The strong magnetic fields of neodymium magnets can also damage magnetic media such as floppy disks, credit cards, magnetic I.D. cards, cassette tapes, video tapes or other such devices. Neodymium magnets can also damage televisions, VCRs, computer monitors, and other CRT displays.

People with pacemakers or similar medical aides should never be **closer than 12 inches to neodymium magnets. The strong magnetic fields of the magnet can affect the operation of such devices.**

Never place neodymium magnets near electronic appliances.

Neodymium magnets will lose their magnetic properties if heated above 175°F (80°C). Neodymium magnets should never be burned, as this creates toxic fumes.

WARRANTY

V&P Scientific, Inc. warrants this product to be free from defects in material and workmanship when used under normal laboratory conditions for one year. This warranty begins from the date of delivery by V&P Scientific.

In the event this product fails under normal laboratory conditions within the specified period of time because of a defect in material or workmanship, V&P Scientific will, at its option, repair or replace the product. Damage to the product caused by user negligence is not covered.

Please contact V&P Scientific at the address below for return authorization and shipping instructions.

This warranty is made in lieu of other warranties expressed or implied including the warranties of merchantability and fitness for a particular purpose. V&P Scientific shall not be liable for loss or damages arising from the use of these products nor for consequential damages of any kind.

If assistance is required, contact V&P Scientific, Inc. at 858-455-0643 or sales@vp-sci.com.