

**Helwig Carbon Bearing Protector Kit
BPK-SB (Patented)
Brush Holder Installation Instructions**



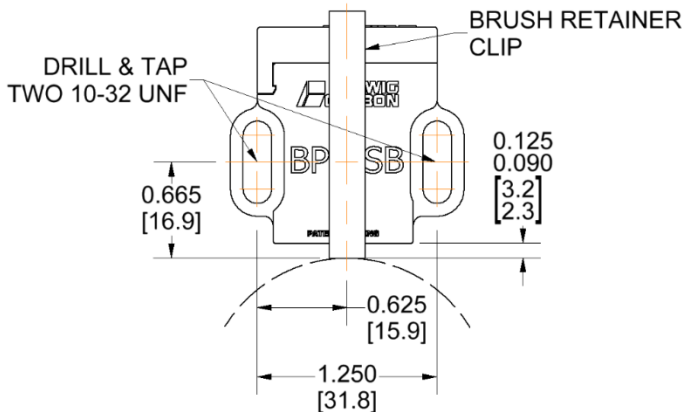
ISO 9001 Certified



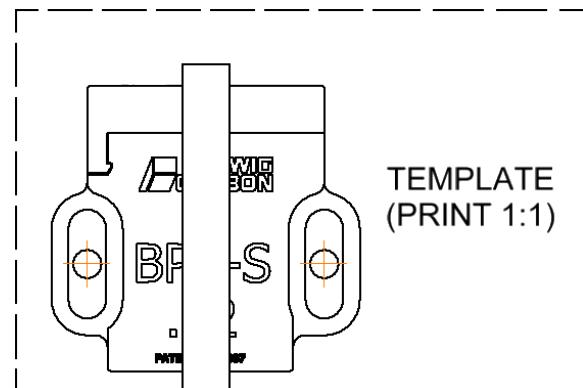
We recommend the brush ride perpendicular to the shaft. The track in which the brush rides on the shaft should be free of scratches, nicks, dents, or defects of any kind. Ideally the shaft surface should be clean with a surface finish within the standard range of most motor manufacturers of 8 to 63 RMS. Do not use any external lubrication. The brush will supply its own lubrication.

Option 1

The BPK-SB uses two 10-32 socket head cap screws. The holders should be mounted 0.090" to 0.125" (2.3 mm to 3.2 mm) from the shaft. Mounting dimensions are given in the diagram below. The brush retainer clip can be used as a guide for proper spacing above the shaft.



Once the holder is installed **remove** the Brush Retainer Clip used to hold the brush in place.



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Caution: When mounting Helwig Carbon Products, Inc. Bearing Protector Kits using 3M™ Dual Lock™ OR 3M™ VHB™ Tape **make sure the separate ground strap, which is supplied with kit, is secured to ground.** Avoid painted surfaces while securing ground connection. The 3M™ Dual Lock™ or 3M™ VHB™ supplied with the holders will not conduct current.

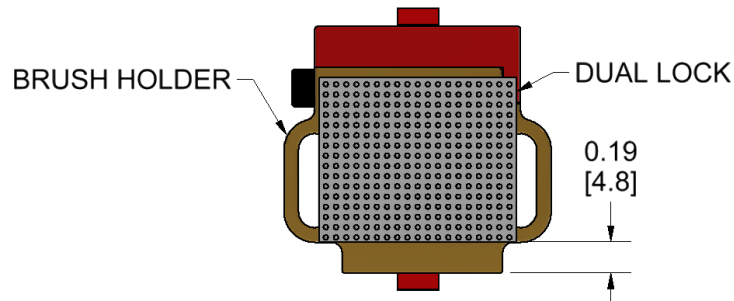
See manufacturer's recommendations for attachment.

1. Dual Lock™ - <https://multimedia.3m.com/mws/media/4352650/dual-locktm-reclosable-fasteners-att-pres-sens-adh-or-heat-bnd.pdf>
2. VHB Tape™ - <https://multimedia.3m.com/mws/media/660190/vhbtm-tape-surface-preparation-technical-bulletin.pdf>

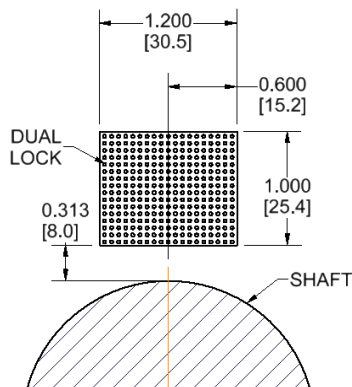
Option 2

Caution: When mounting Helwig Carbon Products, Inc. Bearing Protector Kits using Dual Lock avoid painted surfaces while securing the holder to the motor.

1. **Remove** liner from adhesive and place 3M™ Dual Lock™ onto **Brush Holder**
 - a. See page 2 for recommendations for pressure sensitive adhesive.



2. **Position** the brush holder so that the brush is perpendicular to the shaft and the bottom of the brush holder is 0.090" to 0.125" (2.3 mm to 3.2 mm) from the shaft.
3. **Mark** the position of the 3M™ Dual Lock™ on the unit



4. **Remove** liner from adhesive and place 3M™ Dual Lock™ onto unit.
5. **Push holder** onto unit. Make sure 3M™ Dual Lock™ is securely fastened.
6. **Remove** the Brush Retainer Clip
7. **Connect** one end of the supplied ground strap to the terminal and the other end to ground.

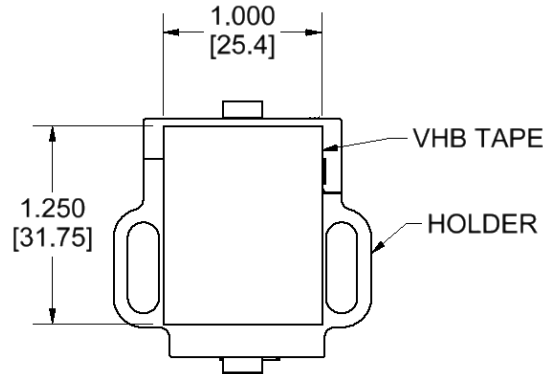
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Option 3 VHB Tape

1. **Remove** liner from adhesive and place 3M™ VHB Tape™ onto **Brush Holder**.



2. **Position** the brush holder so that the Retainer Clip is touching the shaft, is centered on the shaft and is perpendicular to the shaft. The bottom of the brush holder will be 0.188" (3 mm) from the shaft.
3. **Push holder** onto unit. Make sure 3M™ VHB Tape™ is securely fastened.
4. **Connect** one end of the supplied ground strap to the brush holder and the other end to ground.
5. **Remove** the Retainer clip. Make sure the brush extends from the bottom of the holder and is in contact with the shaft.
6. **Connect** one end of the supplied ground strap to the terminal and the other end to ground

