

## Prevent commutator damage caused by worn brushes

- *Prevents damage to the commutator by lifting the worn brush and stopping the motor*
- *Perfect for two brush fractional motors in hand tools and exercise equipment*

### Worn carbon brushes cause commutator damage

Carbon brushes are worn down by use. If the brush becomes too short, there is a risk of electrical wear to the contact surface, primarily caused by arcing and sparking. This results in serious damage to the commutator and the motor or generator. It is important to replace worn brushes before damage occurs.

### The HCP™ prevents damage

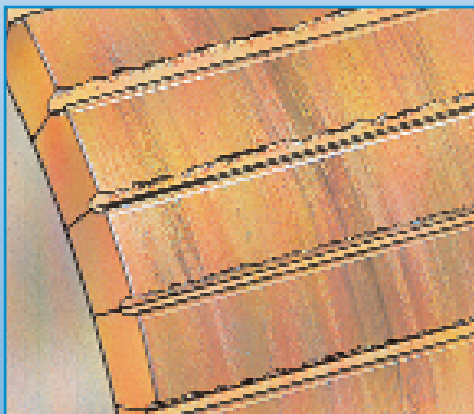
The Helwig Commutator Protector (HCP™) Interrupter prevents damage in your motor by mechanically removing the worn brush and stopping the motor. Located inside the carbon brush is a dowel that lifts the brush off the contact surface, breaking the electrical contact and stopping the motor before commutator wear and damage occurs. This method works best for carbon brushes used in two brush fractional horsepower motors. These motors are found in hand tools and exercise equipment, like power saws and treadmills.

### Proven reliability

Successfully field tested for more than 10 years, the HCP™ Interrupter provides superior protection for commutators at a nominal cost. When brushes become short, the HCP™ Interrupter quickly stops the motor and saves the contact surface from damaging electrical wear. The broader impact of this simple device is savings in motor repairs and replacement.

### Sized to fit

The HCP™ can be used with brushes of all types and sizes. Although the device is recommended especially for two brush fractional motor applications, it is also effective for larger motor sizes.



Damaged Commutator

### To Order:

We will help you determine the proper brush wear length and HCP™ size and length for your application.



- A Reputation for Quality
- Reliability and Consistency
- Best Prices, Best Value
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- Immediate Delivery

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