

**WHIZARD®**

**POWER**

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**K N I F E**

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**OPERATOR'S  
MANUAL**

**Manual #110185  
Issued:6-24-2021  
TMC #846**

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The Information Provided In These Operating Instructions Are Important To Your Health, Comfort And Safety. For Safe And Proper Operation, Read This Entire Manual Before Using This Equipment.



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Original Instructions

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## **SECTION 1.0 Machine Specifications**

The Whizard® Power Knife designed with the highest possible standards for safety, ergonomics and quality, is a highly effective tool with a carefully engineered and durable cutting edge which can provide uniform and constant yield control to all operations.

The Whizard® Power Knife described in this Operating Instruction has been tested by an independent and certified body, Inchcape Testing Services (UK) Ltd, ETL Albury, Manfield Park, Cranleigh, Surrey, England and complies with the Low Voltage Directive 73/23/EEC and EMC 89/336/EEC which includes compliance with the following standards :

- EN 55014
- EN 50082-1
- EN 60335-2-64
- EN 60555
- IEC 801



In addition, this product also conforms to the American standards established by NSF, and UL.

### **Mechanical Specifications:**

- Blade Speed: 1400 RPM (no load)
- Blade Surface Speed: 1040 SFPM

### **Electrical Specifications:**

- Model 109496, 109497 115V/1 Phase/60 Hz 100 Watts
- Model 109502, 109503 220-240V/1 Phase/50-60 Hz 100 Watts

### **General Information:**



Shipping Weight:	14.3 lbs. (6.5 kg)	
Machine Weight:	3.88 lbs. (1.76 kg)	
Overall Size:	Handpiece	12.2" Long x 3.6" Wide x 2.0" High (310mm) x (91mm) x (51mm)
	Power Supply	22" Long x 2.75" Wide x 2.0" High (559mm) x (70mm) x (51mm)



USE ONLY REPLACEMENT PARTS MANUFACTURED BY  
BETTCHEER INDUSTRIES, INC.  
USE OF SUBSTITUTE PARTS WILL VOID THE WARRANTY  
AND MAY CAUSE INJURY TO OPERATORS AND DAMAGE  
TO EQUIPMENT.

## **SECTION 2.0 Designated Use**

### **2.1 Warning**

 <b><u>WARNING</u></b>  <p>THE MANUFACTURER ASSUMES NO LIABILITY FOR ANY UNAUTHORIZED DESIGN CHANGES, MODIFICATIONS, OR USE OF PARTS NOT SUPPLIED BY THE MANUFACTURER OR THE USE OF PARTS NOT DESIGNED FOR USE ON THIS SPECIFIC MODEL, AND INCLUDES CHANGES IN OPERATING PROCEDURES MADE BY THE OWNER OR ANY OF HIS PERSONNEL.</p> <p><u>FOR SAFE AND PROPER OPERATION, READ THE ENTIRE MANUAL BEFORE USING THIS EQUIPMENT.</u></p>
---

### **2.2 Recommended Operation**

The Whizard® Power Knife is a hand-held, motorized circular knife created especially for slicing thin strips of cooked meat for sandwiches such as Gyros and Kabobs. This meat comes pre-formed as a "cone", which is normally slow-cooked on a vertical oven or broiler.

## **SECTION 3.0 Function**

### **3.1 Machine Functions**

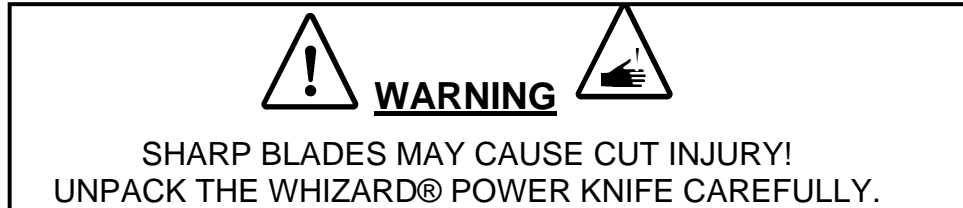
Cutting is accomplished by means of a circular blade driven by a low-voltage motor inside the handle of the tool. The bottom inner edge of this blade is ground and honed to razor sharpness. An adjustable depth gauge determines how deep the blade is allowed to cut into the meat, and also helps to guard the blade. The bottom of the Headpiece frame forms a support on which to rest the Power Knife when not in use. This ensures that the sharp blade edge is safely facing downward, and also allows the hot meat juices to drain from the blade.

## **SECTION 4.0 Safety Features**

The Power Knife incorporates a safety trigger to minimize accidental starting of the tool and an adjustable depth gauge which helps to guard the blade.

## **SECTION 5.0 Unpacking**

### **5.1 Safety First**



### **5.2 Included With Your Machine**

The following parts are included with each Whizard® Power Knife. Please check when unpacking and advise your local Bettcher Industries representative if the delivery is incomplete.

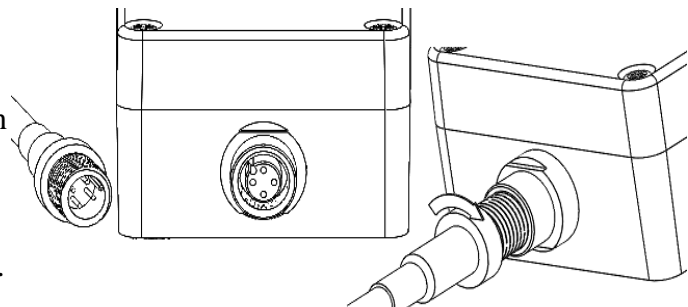
Head Assembly  
Motor Assembly  
30 VDC Power Supply  
Special Stone For Sharpening  
Special Steel For Sharpening  
Operating Instructions

## **SECTION 6.0 Installation**

Please review and read all instructions carefully before attempting to use your Whizard® Power Knife.

To use the Whizard® Power Knife, first provide a clear work area. Place the Power Supply in an enclosed, non-food zone location. (The Power Supply must remain in this zone). Plug the power cord into an appropriate wall outlet. (Refer to the data plate on the power supply fuse enclosure cover for voltage information for your unit).

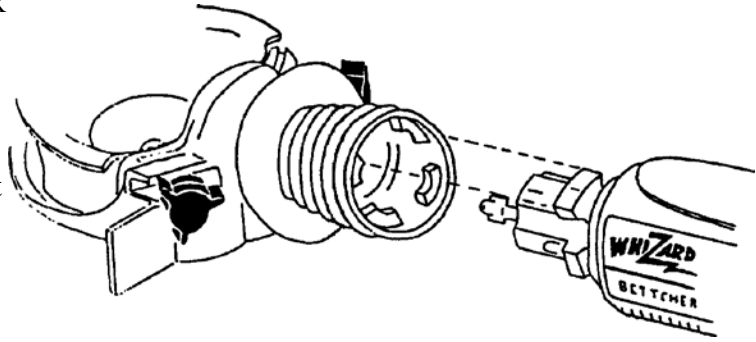
Plug the Motor Unit into the power supply receptacle, lining up the locator tabs on both the cord and the receptacle as shown at right. Tighten the knurled fitting.



## **SECTION 6.0 Installation (continued)**

A tool holder (part number 109164) may be installed on the countertop to provide secure storage for the PowerKnife between uses.

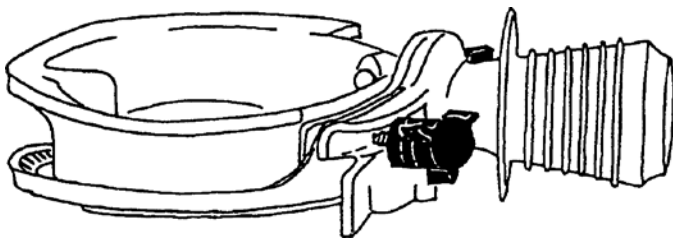
Assemble the Motor Unit into the back of the Headpiece Assembly, lining up the four lugs on the Motor Unit with the four notches in the Headpiece frame. Turn Motor Unit clockwise until snug, but do not over tighten as it may damage the handle. The finned driver will automatically align itself with the drive pinion during assembly. Note that the motor unit will fit into the Headpiece only one way.



## **SECTION 7.0 Instructions for Operation**

The Power Knife is easy to use. Slice thickness is carefully and consistently controlled by the depth gauge. This uniform quality of product has traditionally been possible only from a highly skilled operator using a straight knife. Uniformly-cooked meat can be served due to its consistent thickness.

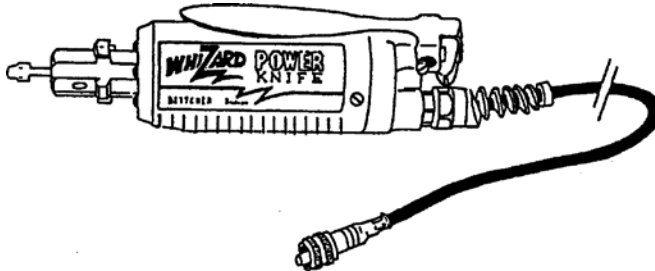
The Power Knife consists of three components:



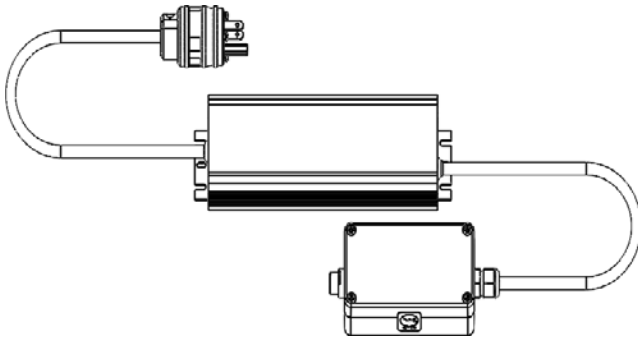
1. *The Headpiece Assembly.* This contains the frame assembly, blade, blade housing, drive pinion, pinion cover, depth gauge, and two bolts with hand knobs. There is also an optional blade cover available. This Headpiece assembly is quickly removable, and may be disassembled without tools. This assembly is **fully cleanable**.



## **SECTION 7.0 Instructions for Operation (continued)**



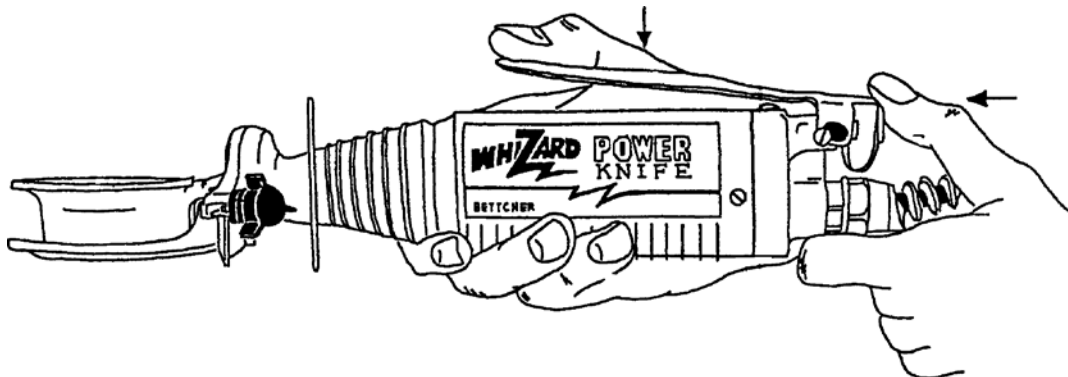
2. *The Motor Unit.* This consists of the motor in a handle-shaped housing, the drive adapter with a replaceable finned driver, the cap/switch assembly with power cable, and the switch lever.



3. *The Power Supply.*  
The Power Supply converts normal grounded AC line voltage to low-voltage DC for the motor.

Each component assembly will be covered fully in the sections which follow.

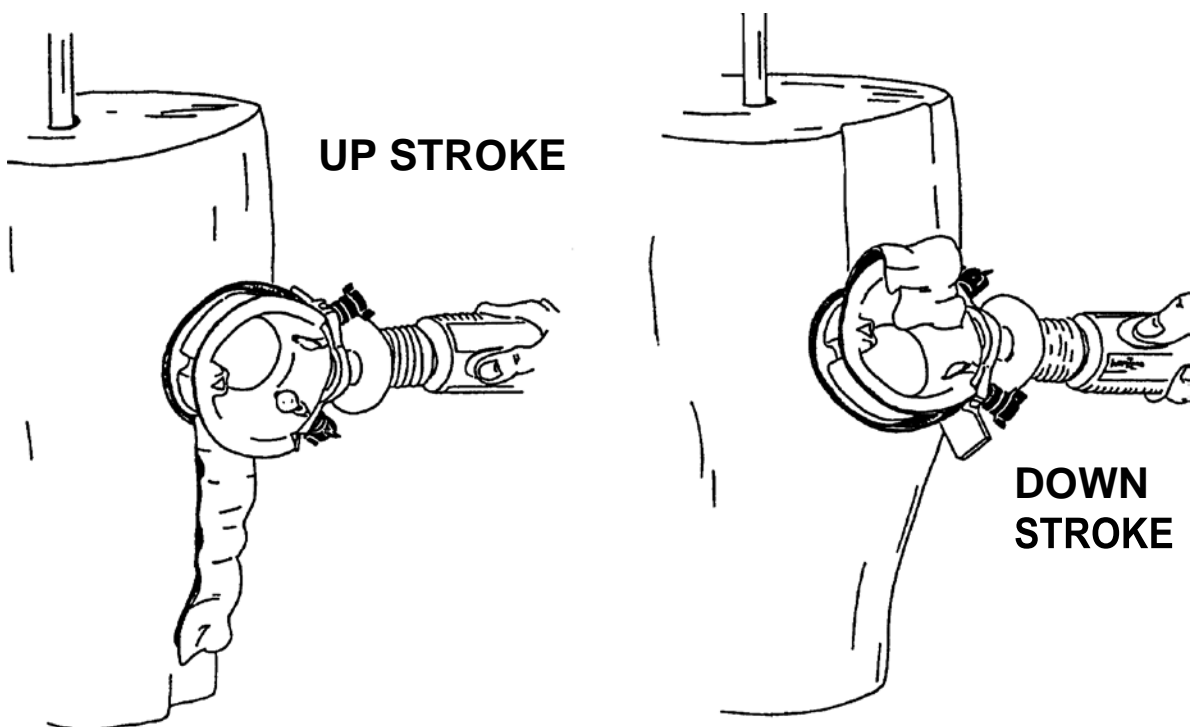
The Power Knife incorporates a safety trigger to minimize accidental starting. TO START, hold the tool in your operating hand. Use your other hand to push the end of the lever forward, and simultaneously squeeze the lever with your operating hand. TO SHUT OFF, simply release the lever.



The tool may be used in either hand.

## **SECTION 7.0 Instructions for Operation (continued)**

To slice meat, **START** the Power Knife and hold it against the meat with the handle horizontal (see illustration). Apply a slight cutting pressure and move the knife up (or down) the meat, as you prefer. Cutting is always done with the trailing edge of the blade- i.e., if you use a down-stroke, the top half of the blade is cutting. Conversely, on an up-stroke, the bottom half of the blade is cutting. (Refer to the illustration) Near the bottom of the cone, it is necessary to use an up-stroke to trim as close as possible to the cone support plate.



The strips of meat will drop from between the blade and the depth gauge as they are cut.

**Note: The Power Knife will not cut properly without its depth gauge in place.**

## **7.1 Fault Detection and Correction**

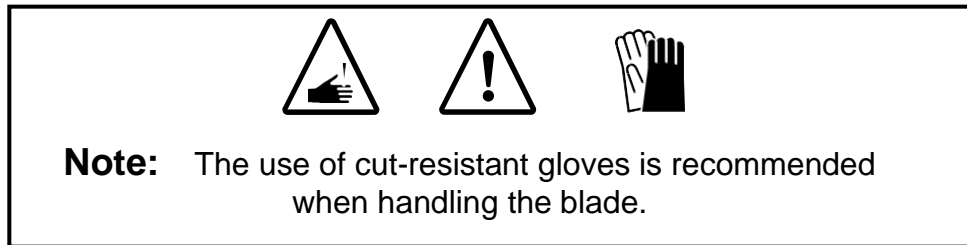
<b>Problem</b>	<b>Probable Cause</b>	<b>Remedy</b>
Motor unit will not run	No power to unit	Check power at outlet - Correct as needed Check fuse in Power Supply - Replace if necessary
	Defective motor	Replace
Motor hums, but blade does not turn	Grease buildup in blade, housing, or pinion	Clean and reassemble
	Blade tight in housing or worn	Re-adjust housing
Motor runs, but blade does not turn	Drive pinion worn or damaged	Replace
	Finned driver sheared or worn	Replace
Tool vibrates excessively	Grease buildup in blade, housing, or pinion	Clean and reassemble
	Blade tight in housing	Re-adjust housing
	Worn pinion	Replace
	Worn blade	Replace
	Worn blade housing	Replace
Tool runs hot	Blade tight in housing	Re-adjust housing
	Grease buildup	Clean and reassemble
Tool does not cut properly	Dull blade	Sharpen and re-steel blade
	Depth gauge improperly adjusted	Re-adjust depth gauge

## **SECTION 8.0 Maintenance**

This tool is easily disassembled for cleaning without the use of tools. For best operation, the Power Knife must be kept clean and sharp.

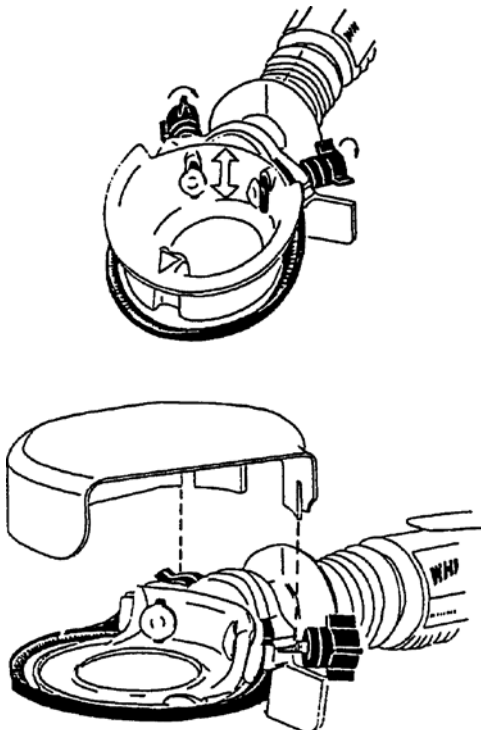
For maintenance videos: [Click here](#)

### **8.1 Headpiece Assembly**



### **Adjusting the Depth Gauge**

This operation is to be performed with the POWER OFF.

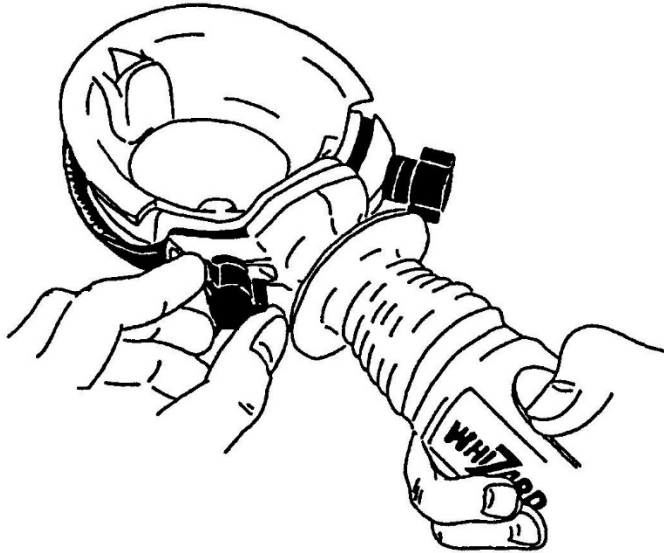


The Power Knife is adjustable for depth of cut by moving the **depth gauge** up or down. Two types of depth gauges are available for the Power Knife. The regular depth gauge is shown in the top illustration. When using the optional blade cover a short-style gauge must be used. Both types of gauges are adjusted the same way. To adjust, loosen the two **knobs** and slide depth gauge UP for thicker cuts, or DOWN for thinner cuts. For normal cuts, a setting where the bottom of the depth gauge is even with the bottom of the blade is correct.

Re-tighten the knobs. Do not over-tighten.

## **8.1 Headpiece Assembly (continued)**

### Adjusting the Blade Housing

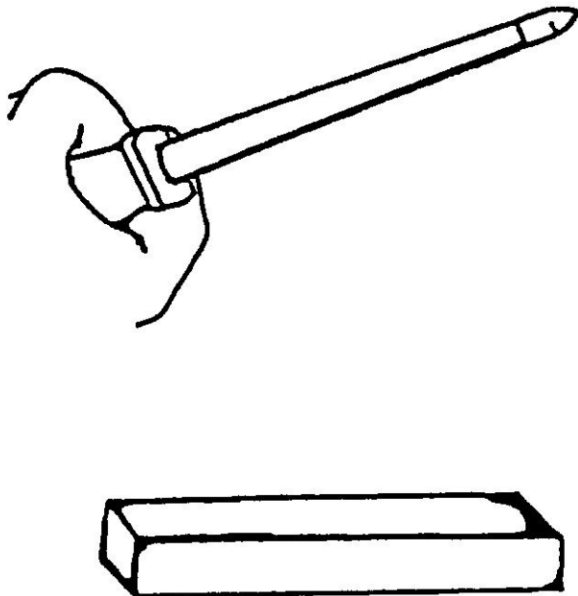


**IMPORTANT:** During normal operation, it may be necessary to periodically loosen and re-tighten the knobs **ONE AT A TIME** *with the tool running* to allow the blade to reposition itself within its housing.

**BE CAREFUL!** Keep your hands away from the moving blade edge.

If the **depth gauge** is allowed to move, it must be readjusted as described.

### Blade Maintenance



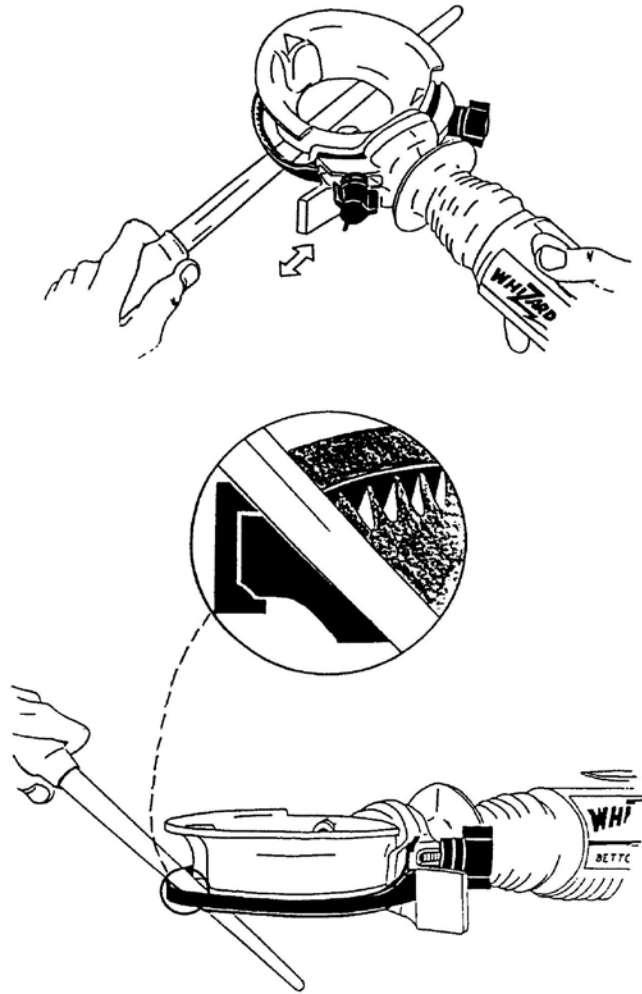
A sharpening stone and a Bettcher "steel" are provided with your Power Knife to help you maintain a good cutting edge, as a sharp blade requires less effort to cut and gives better results. When sharpening or steeling the blade, move the depth gauge up enough to expose the blade edge. Re-adjust after sharpening.

**STEELING** the blade hones the edge to razor sharpness. This should be done frequently. However, when the blade edge becomes nicked and dull and can no longer be brought to a sharp condition, it is necessary to **SHARPEN** the blade using the stone provided. Sharpening actually removes some of the blade material to repair the blade edge.

Clean tool thoroughly after sharpening.

## **8.1 Headpiece Assembly (continued)**

### Steeling the Blade



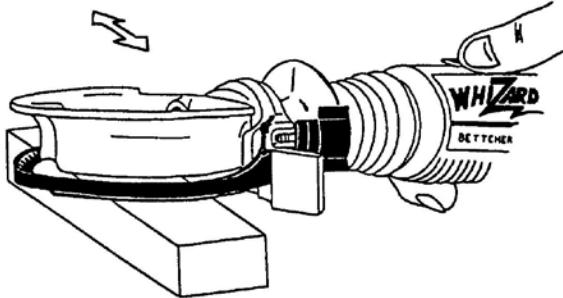
Hold Power Knife in your operating hand and START tool.

Holding steeling rod horizontal with your other hand, lay knife flat on the steel and move it *lightly* back and forth across steel several times. Next place the end of the steeling rod down through the notch in the depth gauge and lightly touch the inside surface of the blade to `raise' the edge for better cutting. The notch helps to hold the steel at the proper angle to the blade edge to prevent "rounding off" or rolling the edge.

Clean tool thoroughly after sharpening.

## **8.1 Headpiece Assembly (continued)**

### Sharpening the Blade



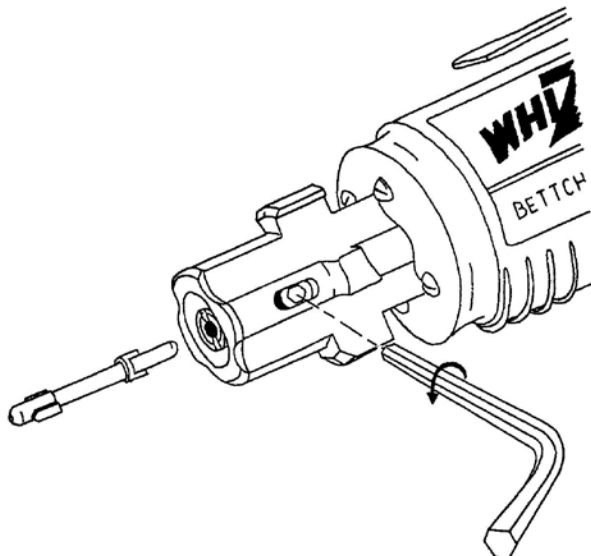
Before sharpening, clean the Power Knife according to the instructions in Section 9.0. Reassemble the tool.

Place the sharpening stone on a soft, non-skid surface such as a folded rag or paper towel.

- Turn power on and **Carefully** lower the blade down against the stone. **DO NOT** get your fingers near the revolving blade, as it is extremely sharp. Keep the blade level and parallel with the stone. Hold the blade against the stone while moving it lightly back and forth. Do this just long enough to make the bottom surface of the blade smooth and flat.
- After sharpening is complete, steel the blade following the instructions. Clean Headpiece thoroughly after sharpening to remove all abrasive dust, following the instructions given. **NOTE:** Both serrated-edge blades and straight- edge blades are sharpened and steeled in the same manner.
- Blades may also be returned to Bettcher Industries for sharpening, using the small shipping box included with your Power Knife. There is a fee for this service.

## **8.2 Motor Unit**

### Routine Service



There are no adjustments on the **Motor Unit**.

The **finned driver** is removable. The handle has a slot at one end as shown to allow access to the setscrew. Loosen the setscrew and remove the driver. When replacing the driver, make sure the fins are seated properly in the metal adapter before tightening the setscrew. Do not over tighten the setscrew as it can damage the plastic driver. A drop of nail polish or threadlocker may be applied to the threads to prevent loosening. The setscrew should be checked periodically, as well as the condition of the driver.

**IMPORTANT:** The Motor Unit is not waterproof. **DO NOT IMMERSE IT IN WATER!** Damage to the motor could result.

## **8.3 Power Supply**

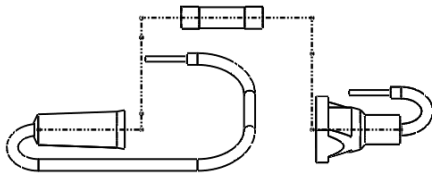
### Maintenance



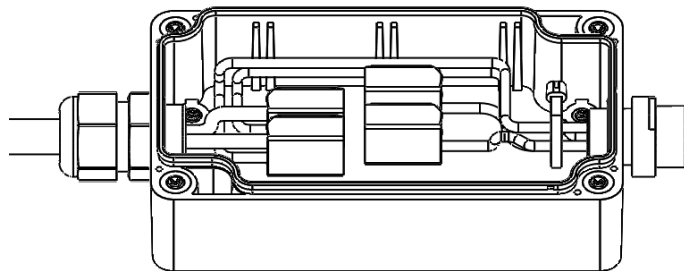
There is no regularly-scheduled maintenance required on the **Power Supply**.

### Changing the Fuse

Risk of shock hazard. Disconnect from line voltage before servicing.



The Power Supply is protected by a 2.5-ampere slow-blow fuse. This fuse is located inside the power-supply fuse box enclosure.



To change the fuse, remove the **cover** of fuse box enclosure by loosening the four captive screws. The fuse is located in a black water tight fuse holder. Separate the two ends of the fuse holder to expose the fuse. Replace the fuse with the proper 2.5-ampere slow- blow fuse.

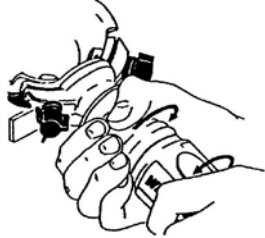
Re-assemble fuse holder and re-install the **cover**. Ensure gasket is properly seated.



## SECTION 9.0 Cleaning

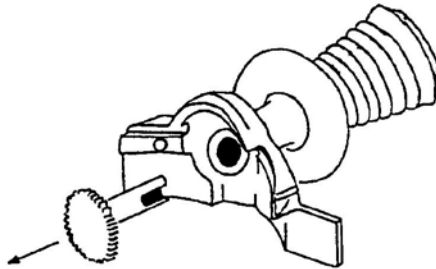
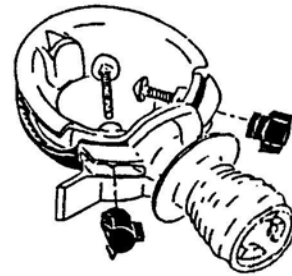
### 9.1 Cleaning the Headpiece Assembly

**IMPORTANT:** For all cleaning operations, Power Knife **MUST** be disconnected from the power supply. **BE CAREFUL** when handling the sharp blade.

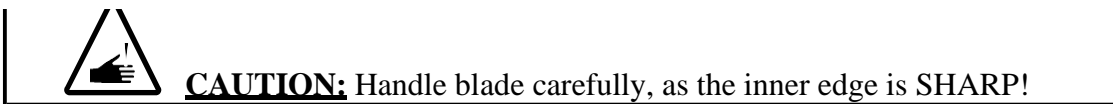


To remove the **Headpiece Assembly** from the **Motor Unit**, hold the Motor Unit in one hand and rotate the Headpiece Assembly one quarter-turn counterclockwise with the other hand. Then withdraw it from the end of the Motor Unit.

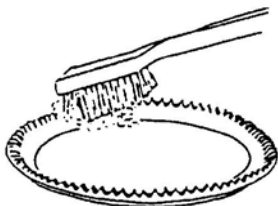
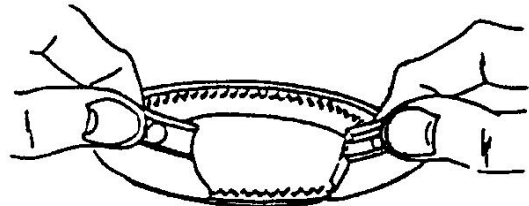
To take Headpiece Assembly apart for cleaning or for maintenance, remove the two **knobs** and **bolts**. All parts can now be removed from the **frame**.



The **drive pinion** may be removed now.



To remove the **blade** from the **blade housing**, place housing on table with blade edge down. Spread housing open and lift away from blade.



Clean all parts using a mild detergent solution. A scrub brush is useful for cleaning the gear teeth on both the **blade** and the **drive pinion**, and for inside the **blade housing**.

**NOTE:** DO NOT use cleaners which contain lemon oils, as they may damage the finish of your tool

Examine all parts for wear or breakage. Replace as necessary. A shipping box has been included as part of the Power Knife kit in which to send parts for replacement.

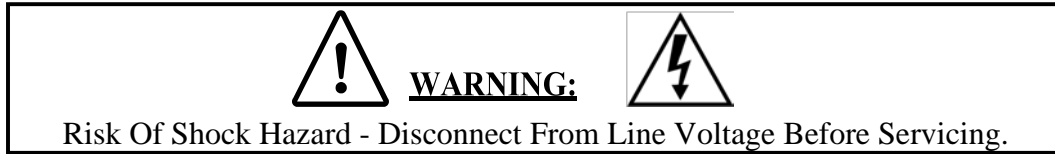
Reassemble in reverse order, making sure **blade** is free to rotate in the **blade housing** and meshes properly with teeth on **drive pinion**.

Re-adjust **depth gauge** setting and re-adjust **blade housing** following instructions given.

## **9.2 Cleaning the Motor Unit**

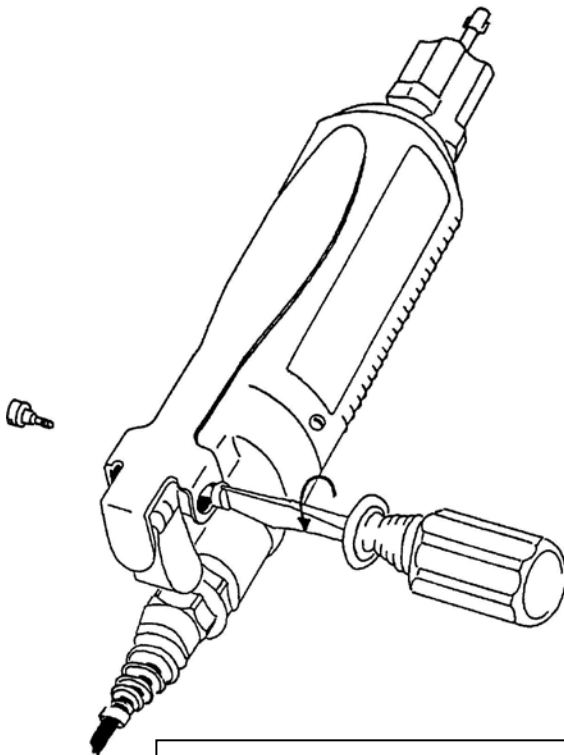
The motor unit may be cleaned with soap and water. **Do not submerge Motor Unit in water. Damage to the motor will result.** Unplug the Motor Unit when cleaning or servicing.

## **9.3 Cleaning the Power Supply**

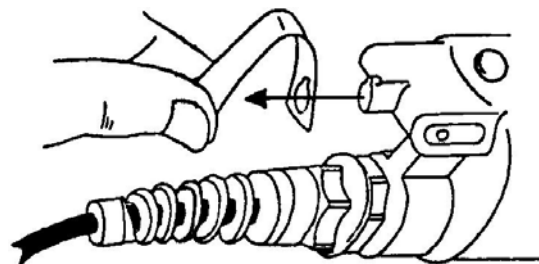


Risk of shock hazard. Disconnect from line voltage before servicing. The Power Supply enclosure may be wiped clean, but **do not submerge unit in water. Damage to the Power Supply will result.**

## **9.4 Daily Cleaning**



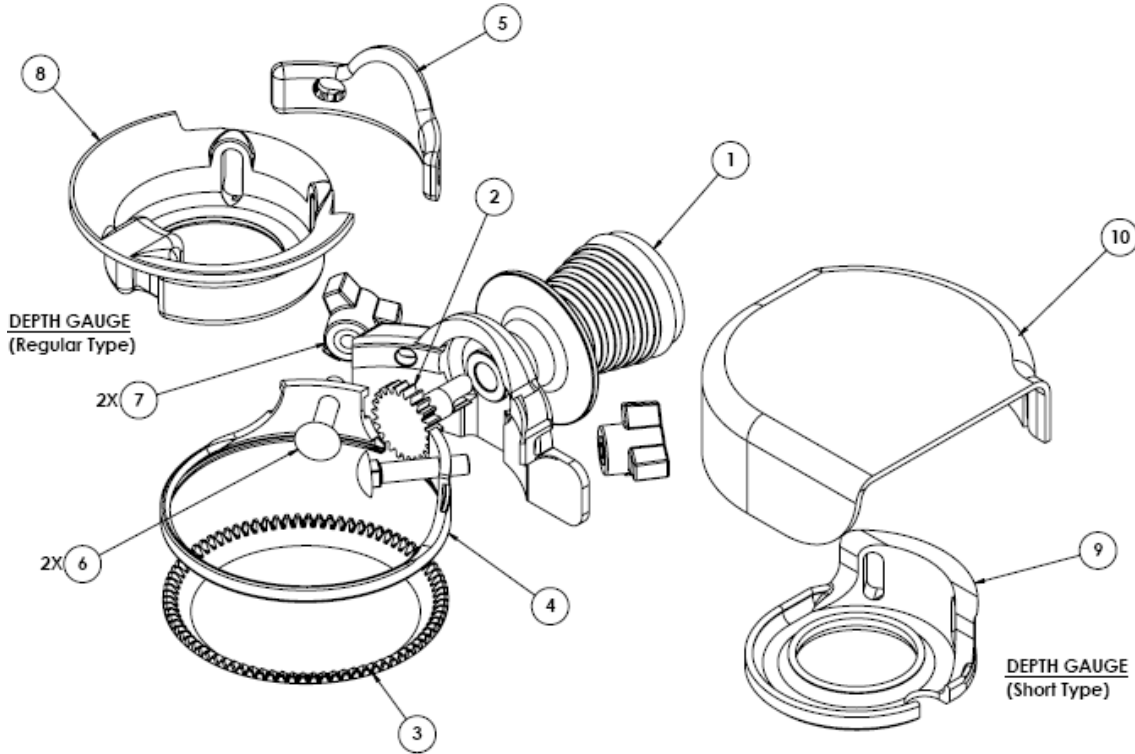
For cleaning, the **lever** may be taken off by removing the two **shoulder screws**. The **flat spring** may be removed from its stud. Do not remove the other screws. The **strain relief** may also be unscrewed for cleaning. When reassembling, the hole in the flat spring fits on the molded stud and its other end is captured by the tab at the end of the lever.



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BETTCHEER EQUIPMENT. FOR OPTIMUM  
PERFORMANCE OF YOUR BETTCHEER EQUIPMENT, USE  
ONLY PARTS MANUFACTURED BY  
BETTCHEER INDUSTRIES, INC.**

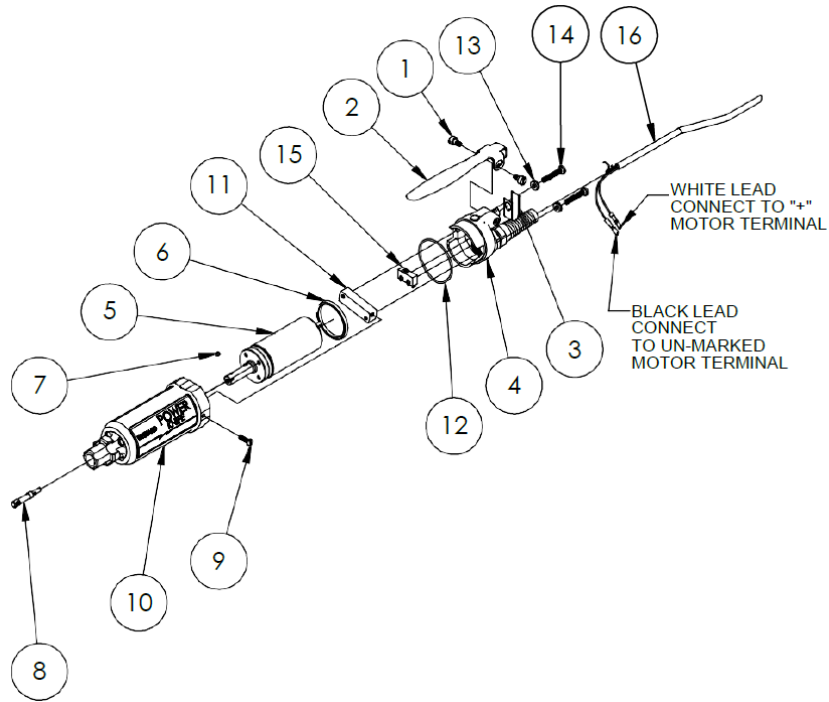
## SECTION 10.0 Spare Parts List

### 10.1 Headpiece Assembly



<u>Item Number</u>	<u>Description</u>	<u>Qty</u>	<u>Models 109497 &amp; 109503</u>	<u>Models 109496 &amp; 109502</u>
	Head Assembly	1	109053	101277
1	Frame Assembly	1	109049	109049
2	Drive Pinion	1	109227	109227
3	Blade - Standard	1	109059	-
	Blade - Serrated		-	109287
4	Blade Housing	1	109058	109058
5	Pinion Cover	1	109057	109057
6	Partially Threaded Coach Bolt	2	111125	111125
7	Handpiece Knob	2	122297	122297
8	Depth Gauge - Regular	1	109082	-
9	Depth Gauge - Short	1	-	109120
10	Blade Cover	1	-	109121

## 10.2 Motor Unit

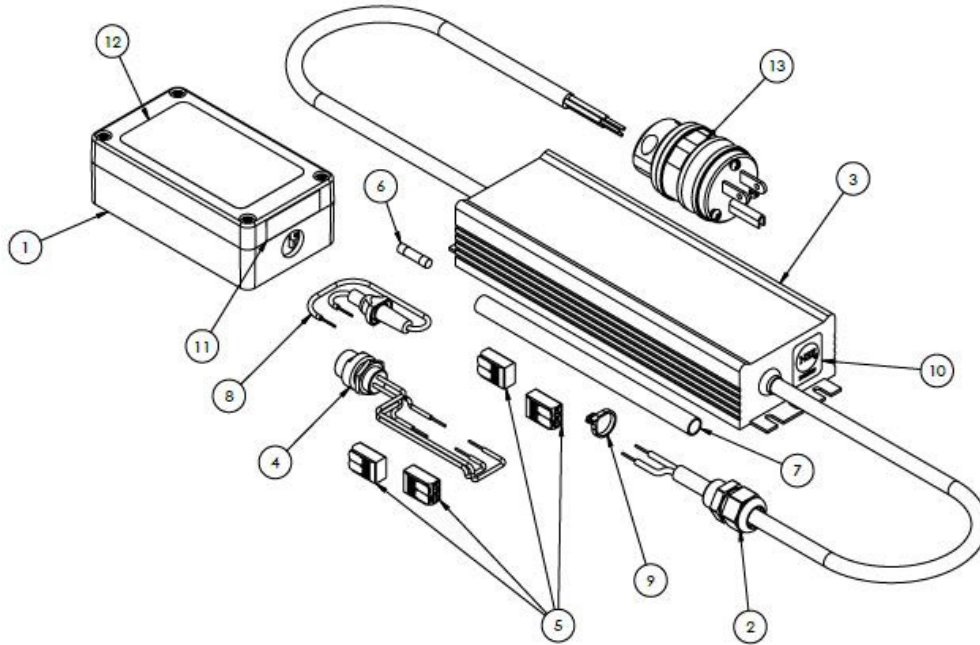


<u>Item</u>	<u>Part Description</u>	<u>Qty</u>	<u>All Models</u>	<u>Notes</u>
-	Motor Unit Complete	1	109185	DOES NOT INCLUDE KNIFE HEAD
1	Shoulder Screw	2	109076	
2	Switch Lever	1	109022	
3	Flat Spring	1	109077	
4	Cap/Switch Assembly	1	109183	
5	Motor Replacement Kit	1	109141	INCLUDES ITEMS 6-9 AND 12-14
6	Motor Support Ring	1	109266	
7	Set Screw	1	123111	
8	Driver Assembly-Metal	1	109259	
9	#6 Self-Sealing Screw	6	123277	
10	Handle Assembly	1	110182	INCLUDES ENGLISH/FRENCH WARNING LABEL
11	Plate	1	109265	
12	O-Ring	1	122488	
13	#8 Sealing Washer	2	122487	
14	#8 Sealing Screw	2	123278	
15	Switch Lever	1	124802	
16	Cable	1	109184	
-	Tool Holder Kit	1	109164	Optional
-	Cap/Handle Replacement Kit	1	109306	Optional

### 10.3 30VDC Power Supply

#### 30VDC POWER SUPPLY

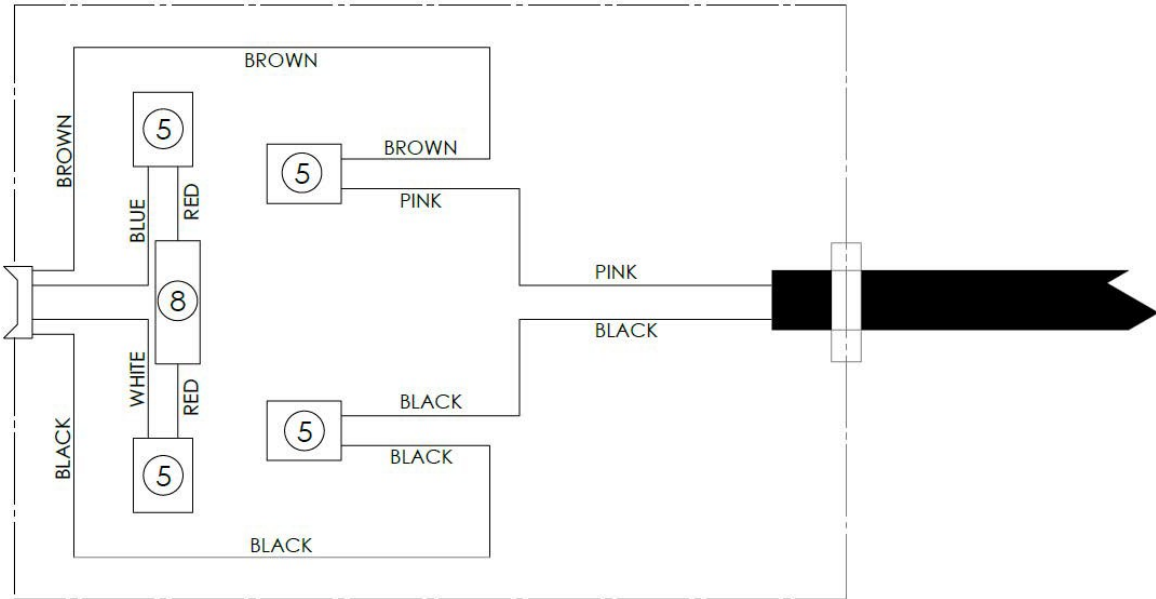
**Models 109496, 109497 (115V/1 Ph/60Hz)**  
**Models 109502, 109503 (220-240V/1 Ph/50-60Hz)**



Item Number	Description	Qty	Model 109496	Model 109497	Model 109502	Model 109503
	Power Supply Assembly		109498	109499	109500	109501
1	Fuse Box Enclosure	1	109174			
2	Strain Relief	1	123001			
3	Power Supply	1	Not Sold Separately			
4	DC Receptacle	1	109162			
5	Terminal Block Connector	4	109182			
6	3.15A Fuse, Time Delay	1	111006			
7	Wire Wrap	1	185404			
8	Fuse Holder	1	109110			
12	Plug	1	103413		109044	

(For Electrical Connections Refer To Schematic, Following Page)

### 10.4 Power Supply Wiring Diagram



## **POWER SUPPLY FUSE ENCLOSURE WIRING DIAGRAM**

## **SECTION 11.0 About These Operating Instructions**

### **11.1 Other Languages**

Translation of this document into a language not already provided within this Operating Instruction can be made available at cost price upon request. Call or write the local Distributor or contact Bettcher Industries.

### **11.2 Document Identification**

Copies of this Operating Instruction may be ordered by quoting the Document ID as listed below:

Document ID :	Manual #110185
Description :	Whizard® Power Knife Operating Instructions
Issued :	October 21, 2020

Operating Instructions for other Whizard® Trimmers may be requested by quoting the model designation of the tool as shown on the identification plate on the Whizard® Trimmer.

### **11.3 Software and Duplication**

This document has been created with Microsoft Word for Windows and set in Palatino 12 points for A-size paper (8.5x11 inches).

For more information, contact your local Representative or :

Bettcher Industries  
Administrative Assistant/Engineering Department  
P.O. Box 336  
Vermilion, Ohio 44089  
U.S.A.

## **SECTION 12.0 Contact Addresses and Phone**

For additional information, technical support and spare parts, contact your local Representative, Distributor, or Bettcher Representative :

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