

**A “STONE SET TECHNOLOGY” PRODUCT**

**US PATENT NUMBER 6668584**

**U N I L O C K**

**(THE ULTIMATE JEWELRY ELEMENT OF PERSONALIZATION)**

**UNILOCK “U” FLUSH INTO GOLD JEWELRY**  
**APPLICATION (1)**

## **UNILOCK**

(The Ultimate Jewelry Element of Personalization)

The “Unilock” as a gem carrier is a barrel shaped tube setting with pre-set gem stones, cabochons or diamonds; designed to be used without the use of solder or adhesives. The Unilock is applied over or into the jewelry at the end of the production cycle using an easy-snap® process with the benefit of delivering urgent last minute orders quickly. The Unilock is utilized by the retailer at their premises to personalize on the spot/over the counter sales of “Mother’s Jewelry”, names or initials, birthstone programs and gifts.

The Unilock setting is produced with a regular barrel, short barrel, straight tube or long barrel and is available in Sterling Silver, 10kt, 14kt, 18kt Gold. This combination of barrel and tube shapes gives the setting unlimited possibilities when installed on various products.



REGULAR

“U”



SHORT

“UX”



STRAIGHT

“UZ”



LONG

“UY”

- **Metals**

GOLD	STAINLESS STEEL	CERAMIC
STERLING SILVER	TITANIUM	TUNGSTEN

- **Jewelry**

CASTING	TURNU	HOLLOW
STAMPED	ELECTROFORM	PHOTOETCH

The advantage of the Unilock is that it simplifies the manufacturing process of the jewelry. It reduces overall cost, creates more flexible inventory-manufacturers can use their own stones; eliminates the need for a skilled jeweler and most importantly: utilizes unparalleled application technology never before available to the jewelry industry. Every gem set into the Unilock has all the desirable features that can be expected from the best stone setters in the industry. The precise positioning of the gem, the minimum amount of metal over the gem, together with the firmness of the stone in its seat; all finished with a mirror polish giving a consistent product appearance and quality. The Unilock is the ultimate, most advanced application system, to set gems into jewelry and gifts today. This application creates new marketing and sales opportunities for the entire industry.

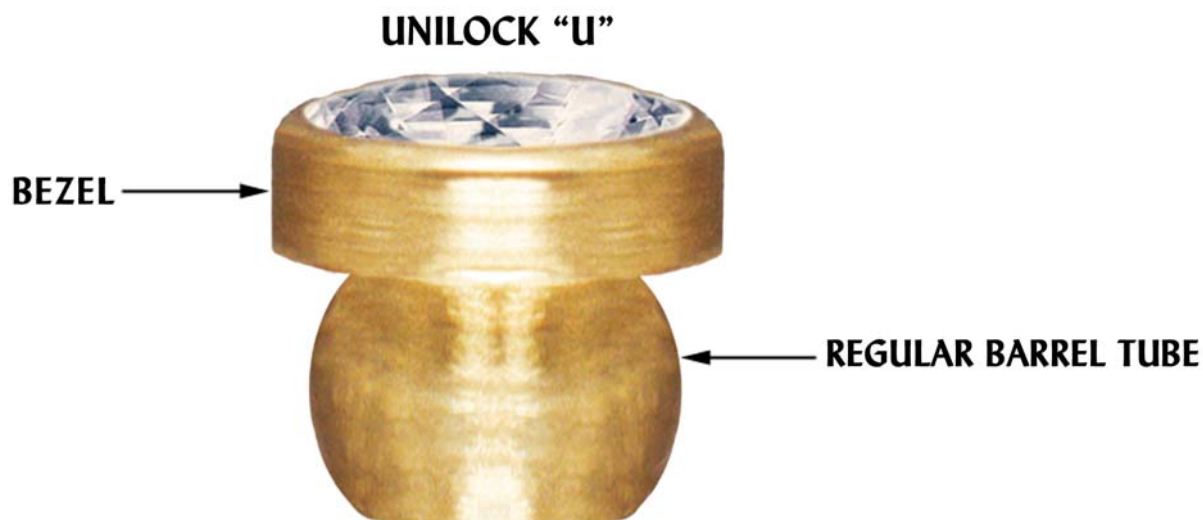
## **UNILOCK APPLICATIONS:**

### **1) Unilock “U” Flush into Gold Jewelry**

- 2) Unilock “U” Flush into Cast Gold Jewelry
- 3) Unilock “U” Flush into Sterling Silver Jewelry
- 4) Unilock “U” Flush into Cast Sterling Silver Jewelry
- 5) Unilock “U” Flush into Stainless Steel Jewelry
- 6) Unilock “U” Flush into Titanium Jewelry
- 7) Unilock “U” Flush into Tungsten Jewelry
- 8) Unilock “U” Flush into Ceramic Jewelry
- 9) Unilock “U” Flush into Enamel Jewelry
- 10) Unilock “U” Flush or Above Pearl Jewelry
- 11) Unilock “U” Above Gold Jewelry
- 12) Unilock “U” Above Cast Gold Jewelry
- 13) Unilock “U” Above Sterling Silver Jewelry
- 14) Unilock “U” Above Cast Sterling Silver Jewelry
- 15) Unilock “U” Above Stainless Steel Jewelry
- 16) Unilock “U” Above Titanium Jewelry
- 17) Unilock “UZ” Above Thin Gold Stamping
- 18) Unilock “UX” Above Sterling Silver Tubing
- 19) Unilock “UX” Above Gold Filled Tubing
- 20) Unilock “UX” Above Hollow Gold
- 21) Unilock “UX” Above Sterling Silver Electroform
- 22) Unilock “UZ” Above Photo Etchings in Gold
- 23) Unilock “U” Flush or “UX” Above Soft & Flexible Materials
- 24) Unilock “U” Flush or Above Wood, Plastic, Composites etc.
- 25) Unilock “U” Flush or Above Aluminum Products

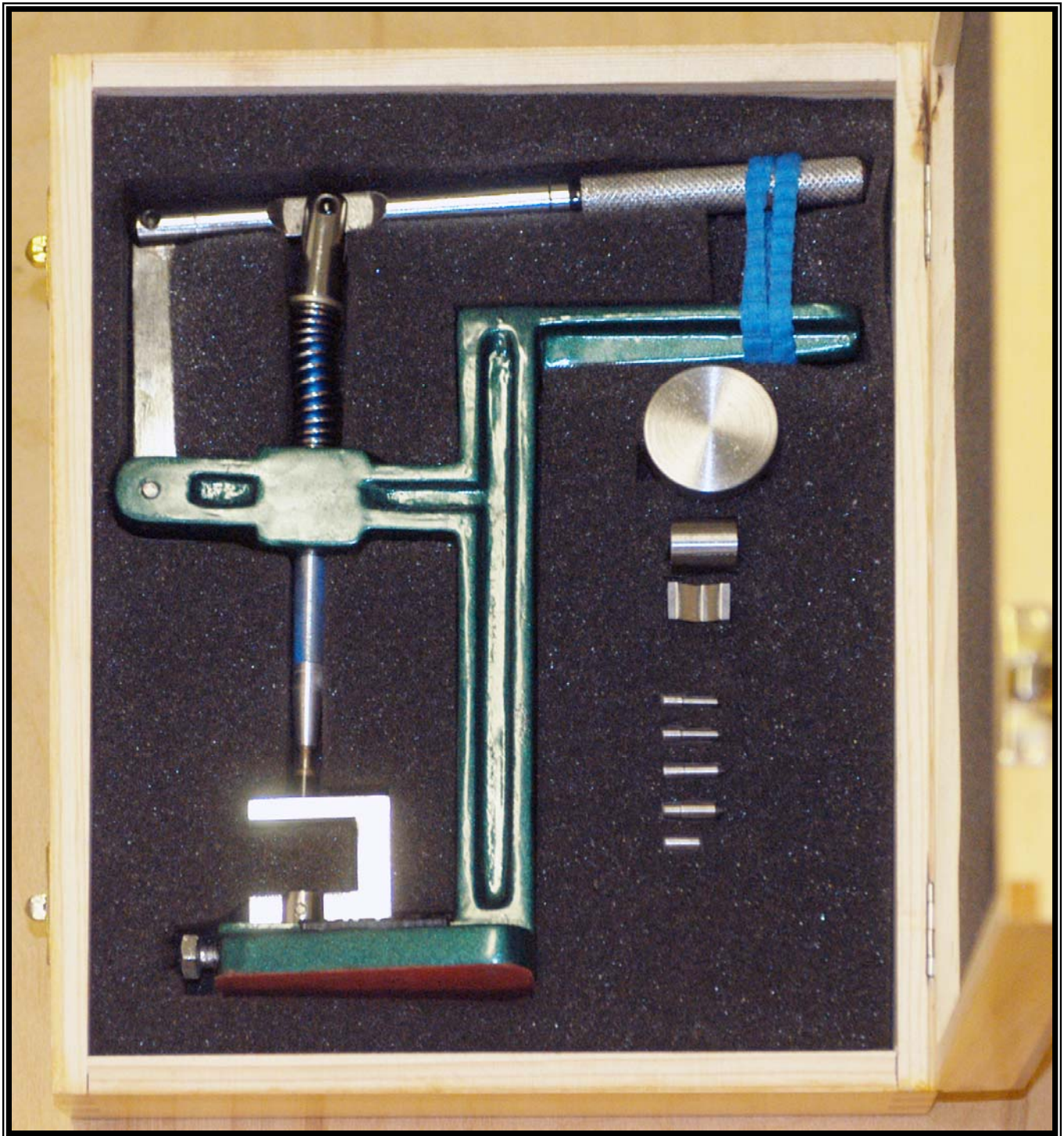
***FOR ALL OTHER APPLICATIONS NOT LISTED ABOVE PLEASE SEND US A  
SAMPLE TOGETHER WITH YOUR REQUIREMENTS AND OUR R&D DEPT WILL  
PROVIDE A SET OF INSTRUCTIONS THAT WILL SUIT YOUR NEEDS.***

## UNILOCK REGULAR TUBE APPLICATION (1)



<b>UNILOCK MODEL</b>	<b>REGULAR BARREL TUBE DIAMETER</b>	<b>TUBE HEIGHT</b>	<b>BEZEL</b>	
			<b>DIAMETER</b>	<b>HEIGHT</b>
U160	1.15mm	0.75mm	1.60mm	0.45mm
U190	1.50mm	0.85mm	1.90mm	0.60mm
U240	2.00mm	0.95mm	2.40mm	0.65mm
U290	2.30mm	1.10mm	2.90mm	0.75mm
U350	3.00mm	1.20mm	3.50mm	0.90mm
U420	3.30mm	1.40mm	4.20mm	1.10mm
U530	4.00mm	1.50mm	5.30mm	1.25mm
U630	5.10mm	1.55mm	6.30mm	1.60mm
U750	6.20mm	1.60mm	7.50mm	1.80mm

THE UNILOCK PRESS w/IMPACT TOOL, UNIVERSAL JIG BASE w/JIG SUPPORTS IS UTILIZED BY THE MANUFACTURER TO SIMPLIFY THE ASSEMBLY OF THE UNILOCK AT THE END OF THE PRODUCTION CYCLE.



THE UNILOCK PRESS w/IMPACT TOOL, UNIVERSAL JIG BASE w/JIG SUPPORTS IS UTILIZED BY THE RETAILER AT THEIR PREMISES FOR THE PERSONALIZATION OF ON THE SPOT/OVER THE COUNTER SALES OF JEWELRY AND GIFTS.

## **UNILOCK FLUSH INTO GOLD JEWELRY APPLICATION (1)**

For the Unilock to sit flush inside the jewelry a two step hole has to be created. The use of a two step drill (USD) is recommended to make this two step hole. Precise and centered drilling equipment allows a one stage direct penetration versus two stage drilling performed at the bench by a jeweler using flexible shaft drilling equipment.

- Use of *Precise and Centered Drilling Equipment* refer to instructions [Page 7](#)
- Use of *Flexible Shaft Drilling Equipment* refer to instructions [Page 8](#)



### **CUSTOMER GEM-STONES USABLE IN UNILOCK**

<b><u>MODEL</u></b>	<b><u>STONE RANGE</u></b>	<b><u>OPTIMAL SIZES</u></b>
U160	1.00mm – 1.30mm	1.20mm – 1.30mm
U190	1.40mm – 1.65mm	1.45mm – 1.55mm
U240	1.70mm – 2.10mm	1.90mm – 2.00mm
U290	2.15mm – 2.55mm	2.40mm – 2.50mm
U350	2.60mm – 3.05mm	2.95mm – 3.05mm
U420	3.10mm – 3.75mm	3.45mm – 3.65mm
U530	3.80mm – 4.70mm	4.00mm – 4.25mm
U630	4.75mm – 5.80mm	4.90mm – 5.40mm
U750	5.90mm – 6.80mm	6.00mm – 6.50mm

The “optimal sizes” are ideal for the Unilock, both for the cosmetic appearance as well as the minimum amount of metal over the gem.

## **UNILOCK FLUSH INTO GOLD JEWELRY APPLICATION (1)**

### ***PRECISE AND CENTERED DRILLING EQUIPMENT***

WITH DIRECT PENETRATION USING THE UNILOCK STEP DRILL (USD)

FOR **UNILOCK** USE **MODEL** AT **RPM** PENETRATION OF THE **LARGE Ø DEPTH**

U160	USD160	3000		0.35mm
U190	USD190	3000		0.45mm
U240	USD240	3000		0.55mm
U290	USD290	2000		0.65mm
U350	USD350	2000		0.75mm
U420	USD420	2000		0.90mm
U530	USD530	1000		1.05mm
U630	USD630	1000		1.25mm
U750	USD750	1000		1.55mm

### **PHYSICAL DIMENSIONS OF THE UNILOCK STEP DRILLS (USD):**

<b><u>MODEL</u></b>	<b><u>SMALL DIAMETER</u></b>		<b><u>LARGE DIAMETER</u></b>
USD160	1.13mm		1.65mm
USD190	1.47mm		1.95mm
USD240	1.95mm		2.45mm
USD290	2.25mm		2.95mm
USD350	2.95mm		3.55mm
USD420	3.25mm		4.25mm
USD530	3.95mm		5.35mm
USD630	5.05mm		6.35mm
USD750	6.15mm		7.55mm

Once the hole has been made the Unilock is ready to be easily snapped into the jewelry

[See Page 9](#)

TO ORDER PARTS, SEE PAGE 16

## UNILOCK FLUSH INTO GOLD JEWELRY APPLICATION (1)

TO CREATE A TWO STEP HOLE USING *FLEXIBLE SHAFT DRILLING EQUIPMENT*

WE RECOMMEND TO FIRST DRILL THE JEWELRY WITH A CENTER DRILL IN ORDER TO HAVE A GUIDE FOR THE UNILOCK TWO STEP DRILL (USD):

<u>UNILOCK</u>	<u>CENTER DRILL</u>	<u>RPM</u> SPEED	<u>MODEL</u>	<u>RPM</u> SPEED
U160	1.00mm	4000	USD160	3000
U190	“	“	USD190	3000
U240	“	“	USD240	3000
U290	“	“	USD290	2000
U350	“	“	USD350	2000
U420	“	“	USD420	2000
U530	“	“	USD530	1000
U630	“	“	USD630	1000
U750	“	“	USD750	1000

Center Drill (CD)



USD  
(two step drill)



To penetrate to the right depth, a tube of urethane can be used as a spacer between the chuck and the jewelry leaving exposed only the desired portion of the drill.



Urethane  
Spacer



For Depth see [Page7](#)

TO ORDER PARTS, SEE PAGE 16

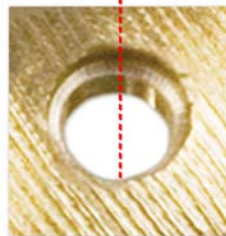
**UNILOCK FLUSH INTO GOLD JEWELRY APPLICATION (1)**  
**EASY-SNAP®**



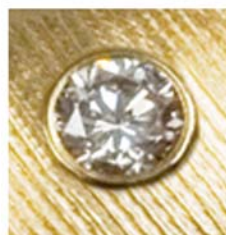
**IMPACT TOOL**



**UNILOCK**



**JEWELRY**



**UNILOCK FLUSH  
INTO JEWELRY**

## IMPACT TOOL

(MODIFIED AUTOMATIC CENTER PUNCH)



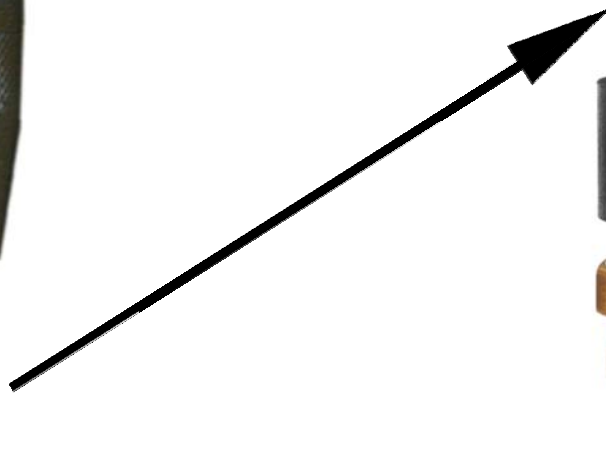
### How to Adjust the Impact Tool Pressure:

Calibrate the snap by turning the top screw

- Clockwise = Stronger Snap
- Counter-Clockwise = Weaker Snap

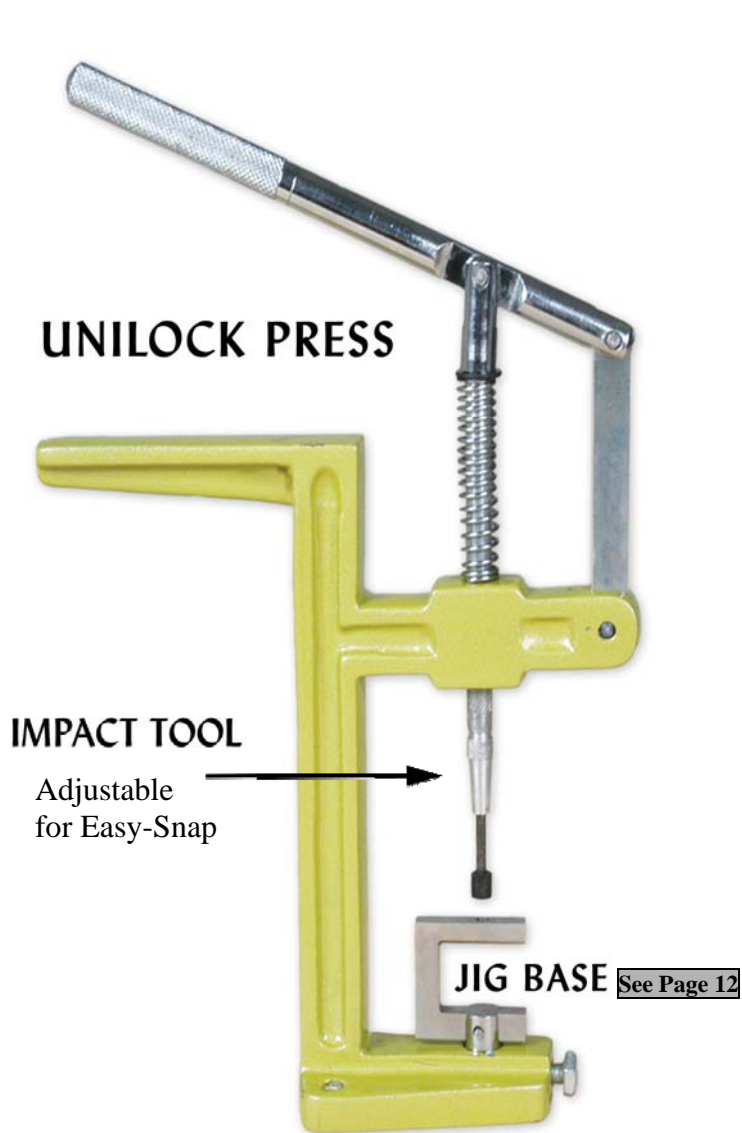
### How to replace the tip:

- 1) Just pull off the tip from the shaft of the impact tool.
- 2) Then push in the new metal tip that you will be using.  
(Replacement tips are available from **Stone Set Technologies**)
- 3) For a tighter fit, a small amount of “**Rodico**” can be used.



Impact Urethane Tip (IUT)

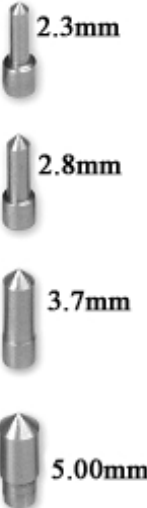




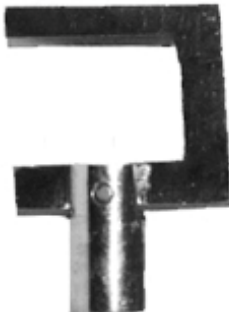
## UNILOCK PRESS WITH IMPACT TOOL AND UNIVERSAL JIG BASE



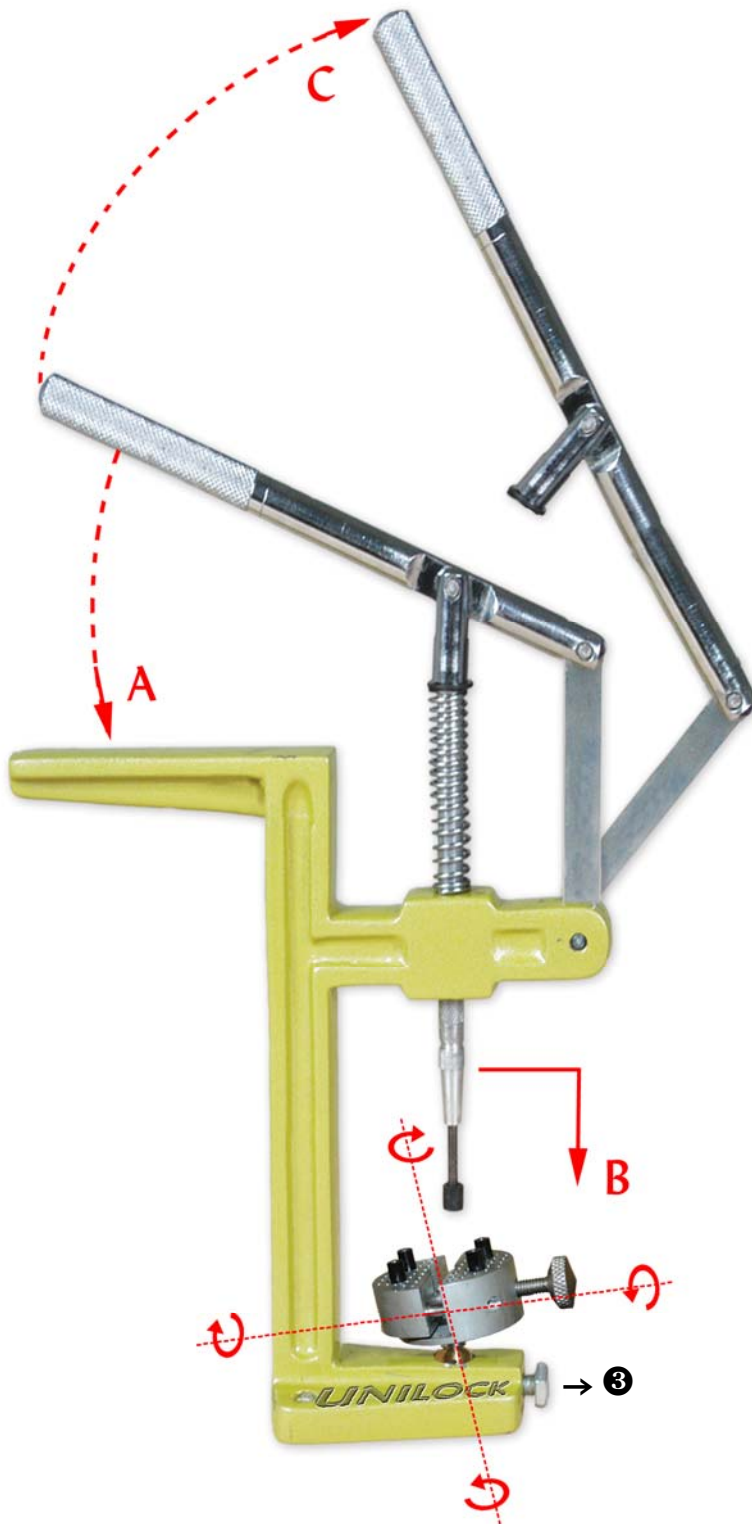
The Unilock Press can be screwed half-way out from the edge of the bench in order to accommodate bangles and other large rounded forms that can rest with their top part over the jig base and the lower part hanging under the press. Jig base supports are needed for this operation.

See next page for a list of jig base supports.

## UNIVERSAL JIG BASE WITH SUPPORTS

<p>The Unilock Press with the Universal Jig Base and the different supports are designed to accommodate many different jewelry shapes with similar ties to the broad spectrum of geometrical forms: Flat, Round, Cylindrical, Concave, Converse and Asymmetrical.</p> <p>This system can adequately cover 80% of the entire spectrum of shapes.</p> <p>For any different jewelry shape not covered, SST will develop the right support for the customer.</p>		<p>The <u>Centrino</u> series of four inserters is used for irregular forms that are supported directly from the bottom (back side of the jewelry item.) The <u>Centrino</u> penetrates thru the irregular form until reaching the center of the hole where the Unilock will be set and snapped.</p>
		<p>The Concave support is used for round or semi-round forms.</p>
		<p>The half round support is used for rings and other curved forms.</p>
		<p>The flat disc support is used for flat forms, stampings, charms, link bracelets etc.</p>
		<p><u>The reference pin</u> is inserted into the top part of the Jig Base as a receiver for the three large supports.</p>
		<p>The Jig Base is U-shaped to accommodate the bottom of a ring shank, bracelet or any large tube earring.</p>

## UNILOCK PRESS FOR EASY-SNAP ® WITH INCLINABLE HOLDER



### How to remove the Impact Tool:

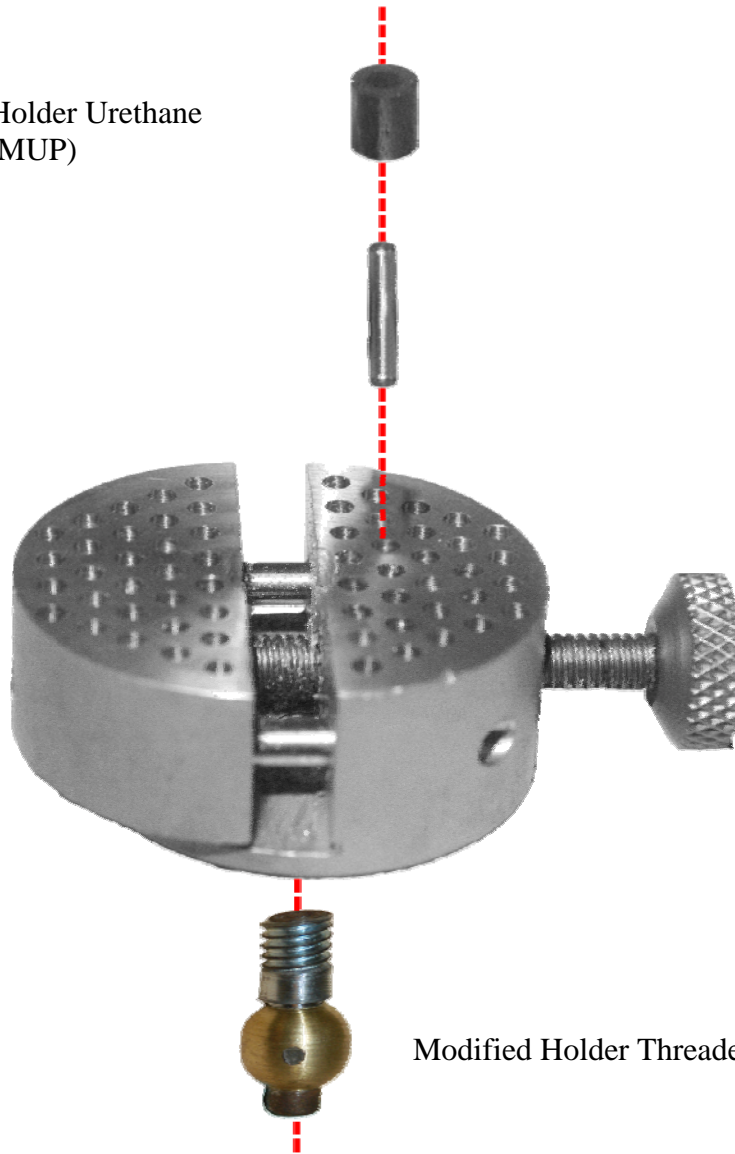
- A - Press the Lever all the way down.
- B - Hold the bottom shaft of the Impact Tool.
- C - Pull the lever handle all the way up and away.
- Now you can Pull the Impact Tool up and out from the press.

### How to insert Inclinable Holder:

- 1) Insert Ball into hole in base of press all the way down.
- 2) Adjust Inclination.
- 3) Secure by tightening lock screw clockwise.

## **INCLINABLE MODIFIED HOLDER FOR UNILOCK PRESS**

Modified Holder Urethane  
Protector (MUP)



Modified Holder Threaded Ball (MTB)

TO ORDER PARTS, SEE PAGE 16

## **UNILOCK ORDER SHEET**

<b><u>Month</u></b>	<b>Birthstone</b>	<b>Gem Size</b>	<b>Unilock Model</b>	<b>Type of Metal</b>	<b>Application</b>	<b>Tube Type</b>	<b>Quantity</b>
<b>January</b>							
<b>February</b>							
<b>March</b>							
<b>April</b>							
<b>May</b>							
<b>June</b>							
<b>July</b>							
<b>August</b>							
<b>September</b>							
<b>October</b>							
<b>November</b>							
<b>December</b>							

<b>Other Gems and Diamonds</b>	<b>Gem Size</b>	<b>Unilock Model</b>	<b>Type of Metal</b>	<b>Application</b>	<b>Tube Type</b>	<b>Quantity</b>

### **ORDER DELIVERY TIME**

Unilock samples are delivered within one week's time as per stock availability.

Orders of Unilock in Sterling Silver are delivered within 3-4 weeks  
after customer stones are received.

Orders of Unilock **U160, U190, U240, U290 & U350** made in 14kt yellow gold are delivered  
within 3-4 weeks after customer stones are received.

Orders of Unilock **U160, U190, U240, U290 & U350** of different gold karatages and colors  
are delivered within 6-8 weeks.

Orders of Unilock **U420, U530, U630 & U750** of any karatage and color are subject to  
minimum quantities and are delivered within 6-8 weeks.

## **UNILOCK PRODUCTION SUPPORT APPLICATION (1)**

### **AVAILABLE FROM STONE SET TECHNOLOGIES**

- 1) The *Unilock Press and Impact Tool* with Universal Jig Base and jig supports –  
Pages 5, 11, 12 - are provided to Unilock users at cost. This service is provided  
only to our customers.
- 2) *Unilock Step Drill (two step carbide drill)* (USD) – page 7
- 3) *Center Drill* (CD) – page 8
- 4) *Impact Tool* – page 10
- 5) *Impact Tool Urethane tip replacement* (IUT) – page 10
- 6) *Inclinable Modified Holder Parts* – page 14
  - a) Holder Urethane Protector (MUP)
  - b) Hardened Holder Threaded Ball (MTB)

### **AVAILABLE DIRECTLY FROM INDIVIDUAL VENDORS**

- 7) *Inclinable Modified Holder* (universal work holder w/pegs) – page 14:  
Rio Grande #113-089 [www.riogrande.com](http://www.riogrande.com) 1.800.545.6566

#### **STONE SET TECHNOLOGIES LLC.**

**TEL: 954.565.4979**

**TOLL FREE: 888.201.3586**

**FAX: 954.565.4931**

**MAIL:**

P.O. BOX 48020

FT. LAUDERDALE, FL 33348

**DELIVERIES:**

3532 N. OCEAN BLVD. 2<sup>ND</sup> FLOOR

FT. LAUDERDALE, FL 33308

[WWW.UNILOCK.US](http://WWW.UNILOCK.US)