

A “STONE SET TECHNOLOGY” PRODUCT

US PATENT NUMBER 6668584

U N I L O C K

(THE ULTIMATE JEWELRY ELEMENT OF PERSONALIZATION)

UNILOCK “UX” ABOVE GOLD FILLED TUBING
APPLICATION (19)

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	TURNED	HOLLOW
STAMPED	ELECTROFORM	PHOTOETCH

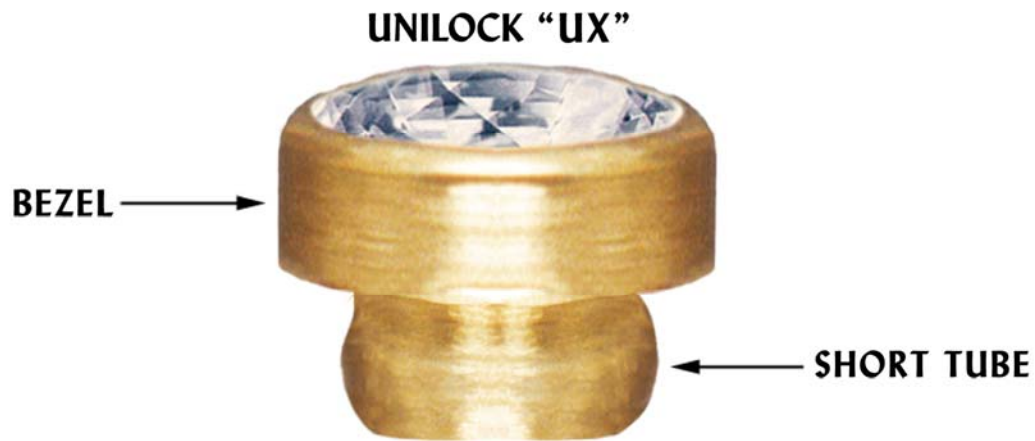
The advantage of the Unilock is that it simplifies the manufacturing process of the jewelry. It reduces overall cost, creates more flexible inventory-manufacturers can use their own stones; eliminates the need for a skilled jeweler and most importantly: utilizes unparalleled application technology never 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

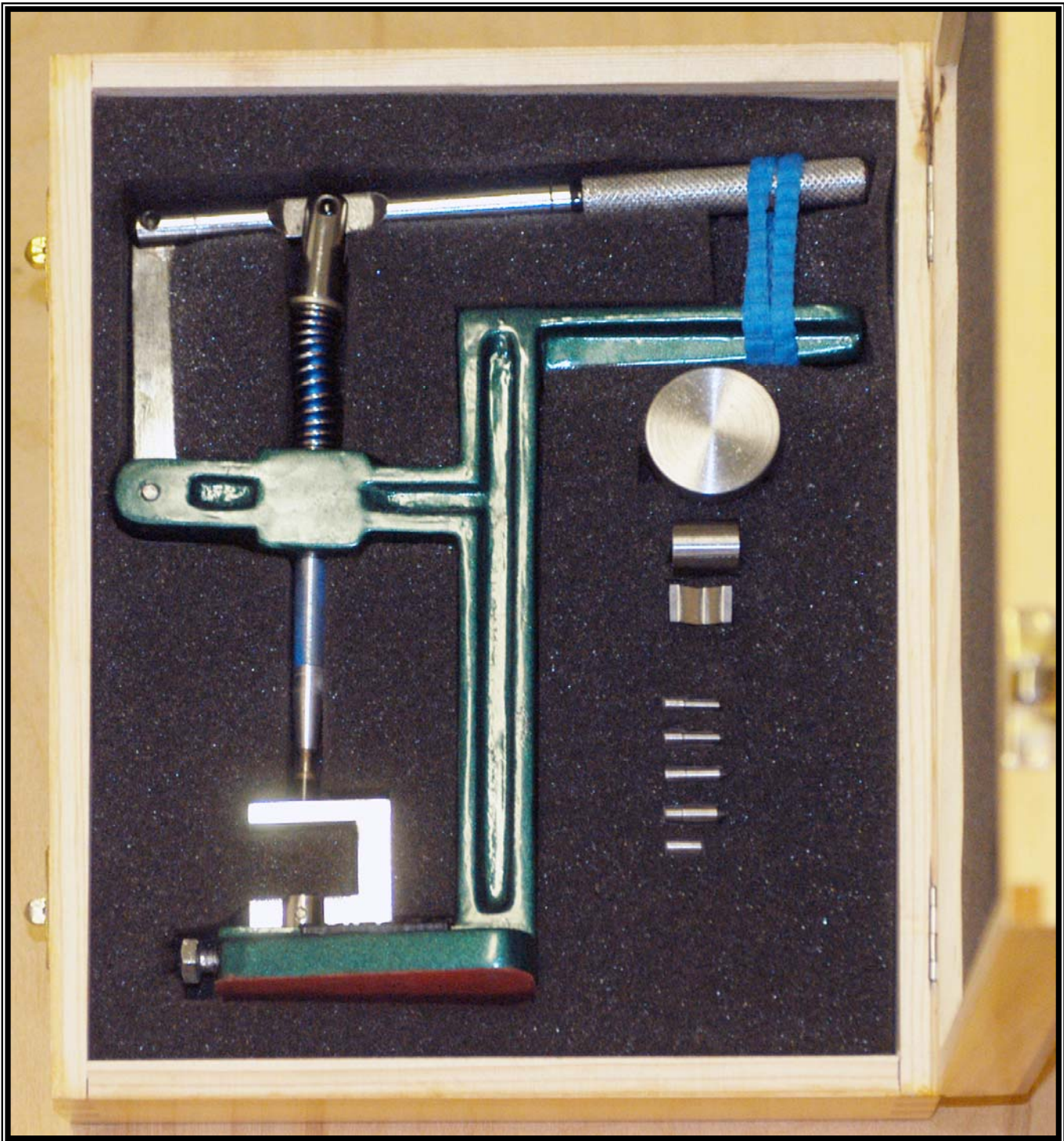
***FOR ALL OTHER APPLICATIONS NOT LISTED ABOVE PLEASE SEND US A
SAMPLE TOGETHER WITH YOUR REQUIREMENTS AND OUR R&D DEPT WILL PROVIDE
A SET OF INSTRUCTIONS THAT WILL SUIT YOUR NEEDS.***

UNILOCK SHORT TUBE APPLICATION (19)



<u>UNILOCK MODEL</u>	<u>REGULAR BARREL TUBE DIAMETER</u>	<u>TUBE HEIGHT</u>	<u>BEZEL</u>	
			<u>DIAMETER</u>	<u>HEIGHT</u>
UX 160	1.15mm	0.65mm	1.60mm	0.45mm
UX 190	1.50mm	0.70mm	1.90mm	0.60mm
UX 240	2.00mm	0.75mm	2.40mm	0.65mm
UX 290	2.30mm	0.85mm	2.90mm	0.75mm
UX 350	3.00mm	0.95mm	3.50mm	0.90mm
UX 420	3.30mm	1.00mm	4.20mm	1.10mm

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 ABOVE GOLD FILLED TUBING APPLICATION (19)

For the Unilock to sit above the Gold Filled Tubing extreme care should be exercised while making the precise hole in order to prevent the tube's deformation. For this application a Unilock Short Tube (UX) should be used (see page 7 for Unilock models recommended over different tube diameter sizes.) Also the easy snap-in must be made with the impact tool set at minimum pressure (see page 9.)

- For drilling instructions see [Page 8](#).



CUSTOMER GEM-STONES USABLE IN UNILOCK

<u>MODEL</u>	<u>STONE RANGE</u>	<u>OPTIMAL SIZES</u>
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

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 ABOVE GOLD FILLED TUBING APPLICATION (19)

The table below indicates the Unilock Short Tube (UX)
that can be used over different tube diameter sizes:

TUBE FROM 3mm DIAMETER UP TO 6mm DIAMETER:

UX160

UX190

UX240

TUBE FROM 6mm DIAMETER UP TO 9mm DIAMETER:

UX160

UX190

UX240

UX290

UX350

TUBE OVER 9mm DIAMETER:

UX160

UX190

UX240

UX290

UX350

UX420

UNILOCK ABOVE GOLD FILLED TUBING APPLICATION (19)

The perforation of the Gold Filled tubing and the calibration of the hole must be made with precise centered drilling equipment with a rotating speed of 5000 RPM and slow penetration with the jewelry firmly subject on the holder first using the two step drill (USD.) The larger diameter of the USD is used only to clean the burr and then the Calibrated Ball to burnish precisely the hole. With regular drilling equipment the perforation should be made with a rotating speed of 5000 RPM using the two step drill (USD) and the calibration of the hole at the lowest speed possible (150RPM) holding the jewelry by hand against the Calibrated Ball.

FOR <u>UNILOCK</u>	USE <u>MODEL</u>	AT <u>RPM</u>	<u>CALIBRATED BALL</u>	<u>RPM</u>	<u>OR</u>	<u>RPM</u>
UX160	USD160	5000	CB160-1.13mm	5000		150
UX190	USD190	5000	CB190-1.48mm	5000		150
UX240	USD240	5000	CB240-1.98mm	5000		150
UX290	USD290	5000	CB290-2.28mm	5000		150
UX350	USD350	5000	CB350-2.98mm	5000		150
UX420	USD420	5000	CB420-3.28mm	5000		150

MODEL

SMALL DIAMETER

USD160		1.13mm
USD190		1.47mm
USD240		1.95mm
USD290		2.25mm
USD350		2.95mm
USD420		3.25mm



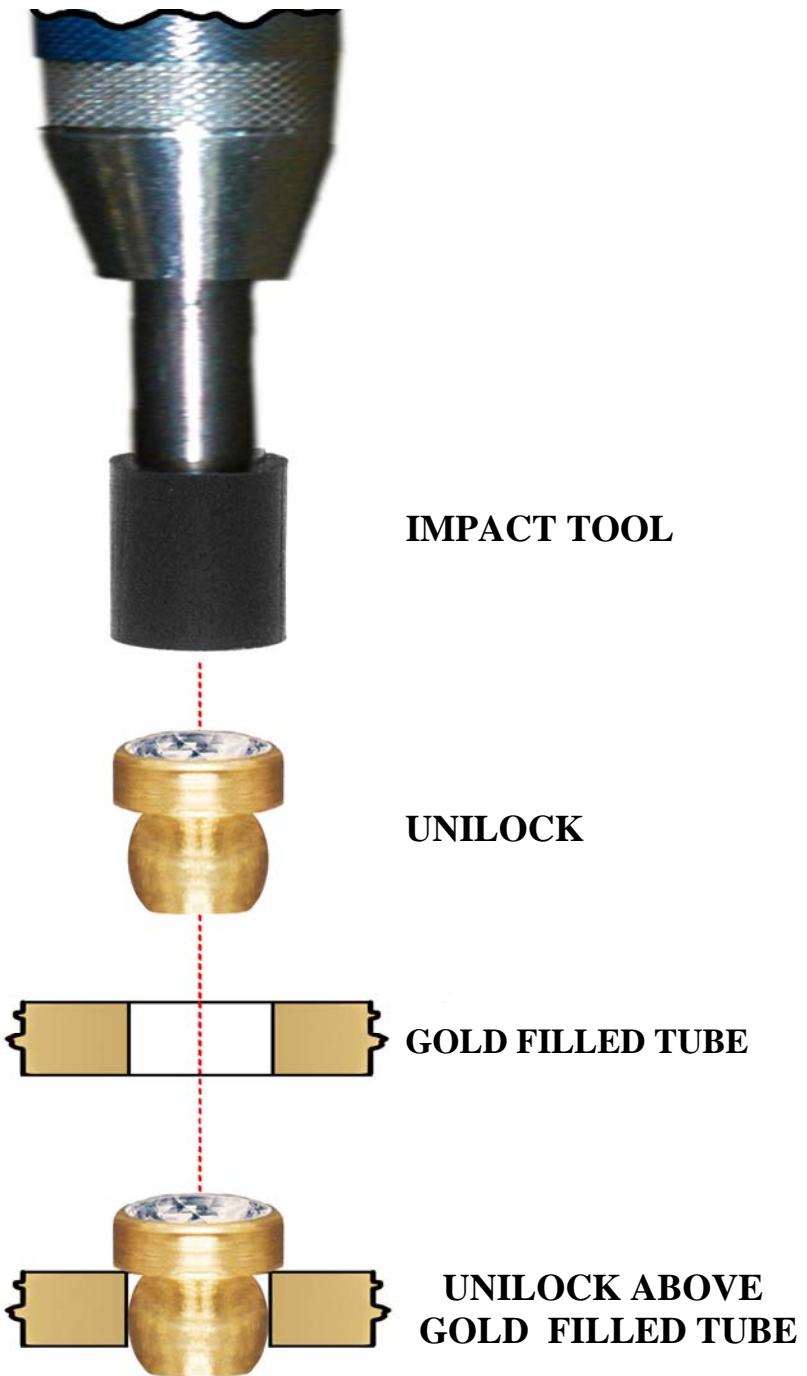
CALIBRATED
BALL
(CB)

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

See Page 9

The snap pressure of the impact tool should be adjusted to a minimum to prevent deformation.

UNILOCK ABOVE GOLD FILLED TUBING APPLICATION (19)
EASY SNAP®



How To Adjust The Impact Tool Pressure

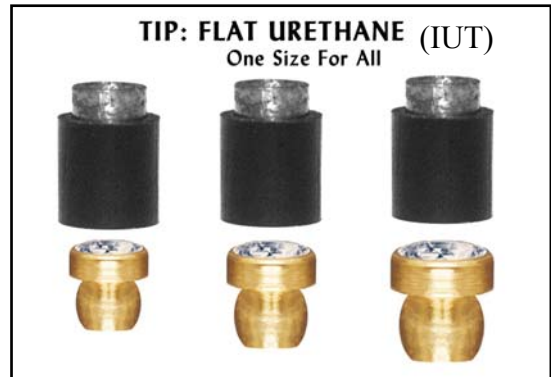
Calibrate the snap by turning the top screw

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



IMPACT TOOL

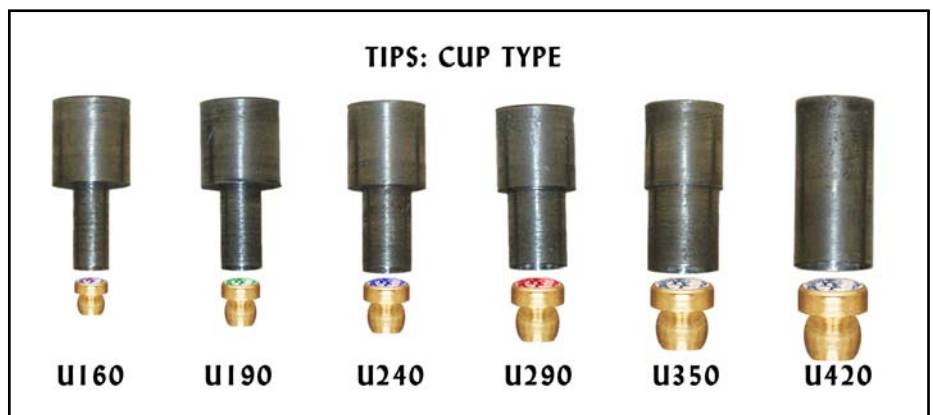
FOR EASY-SNAP MADE BY PRESS



IMPACT TOOL

FOR EASY-SNAP MADE BY HAND

- Position the UNILOCK inside the jewelry hole
- Match the UNILOCK to the corresponding tip cup size and then EASY –SNAP in.



How to replace the tip:

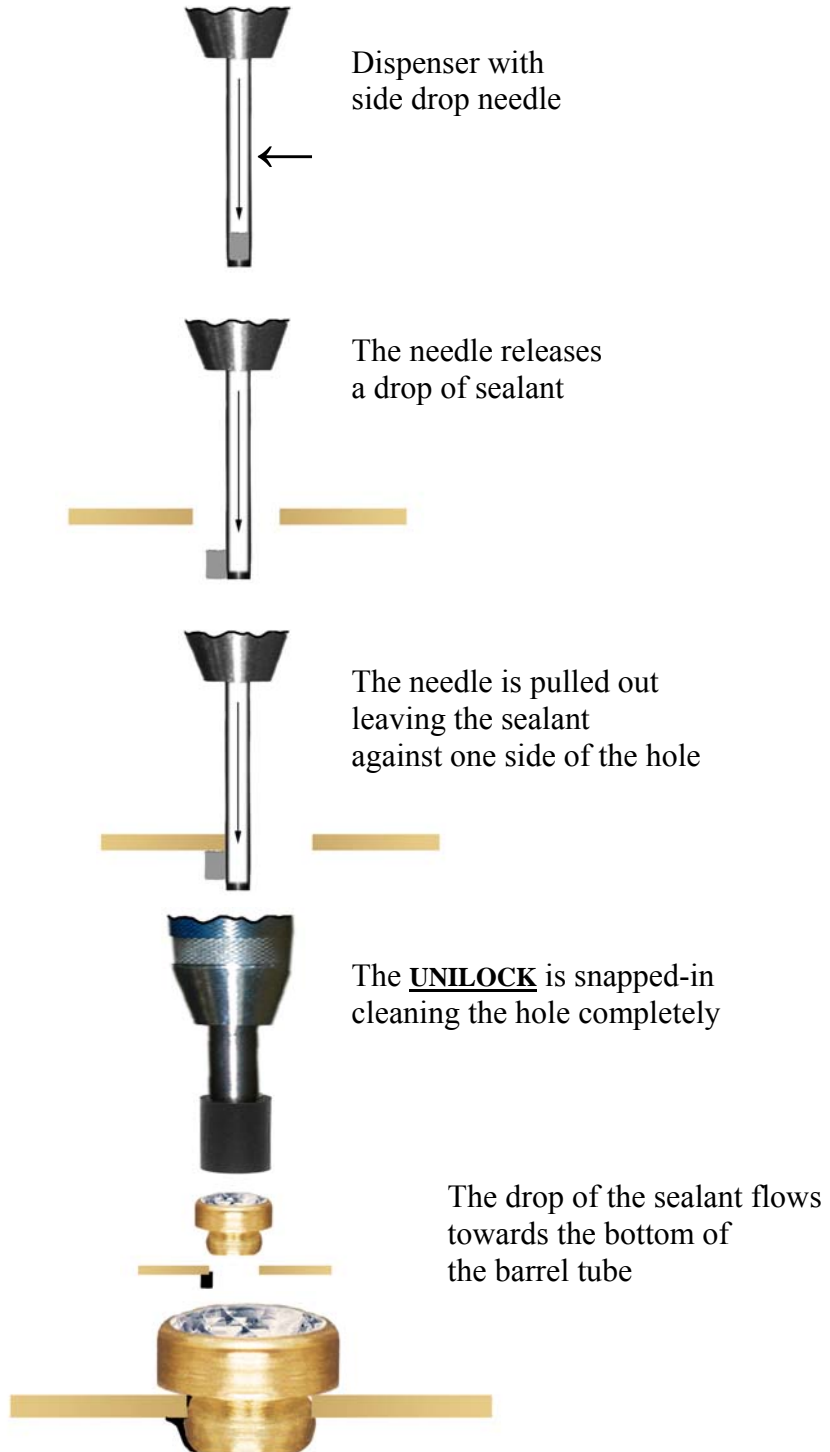
- 1) Just pull off the tip from the shaft of the impact tool.
- 2) Then push in the new metal tip that you will be using
(Replacement tips are available from **Stone Set Technologies**)
- 3) For a tighter fit a small amount of “**Rodico**” can be used.

TO ORDER PARTS, SEE PAGE 19

OPTIONAL APPLICATION (19)

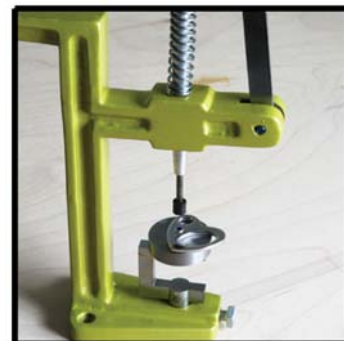
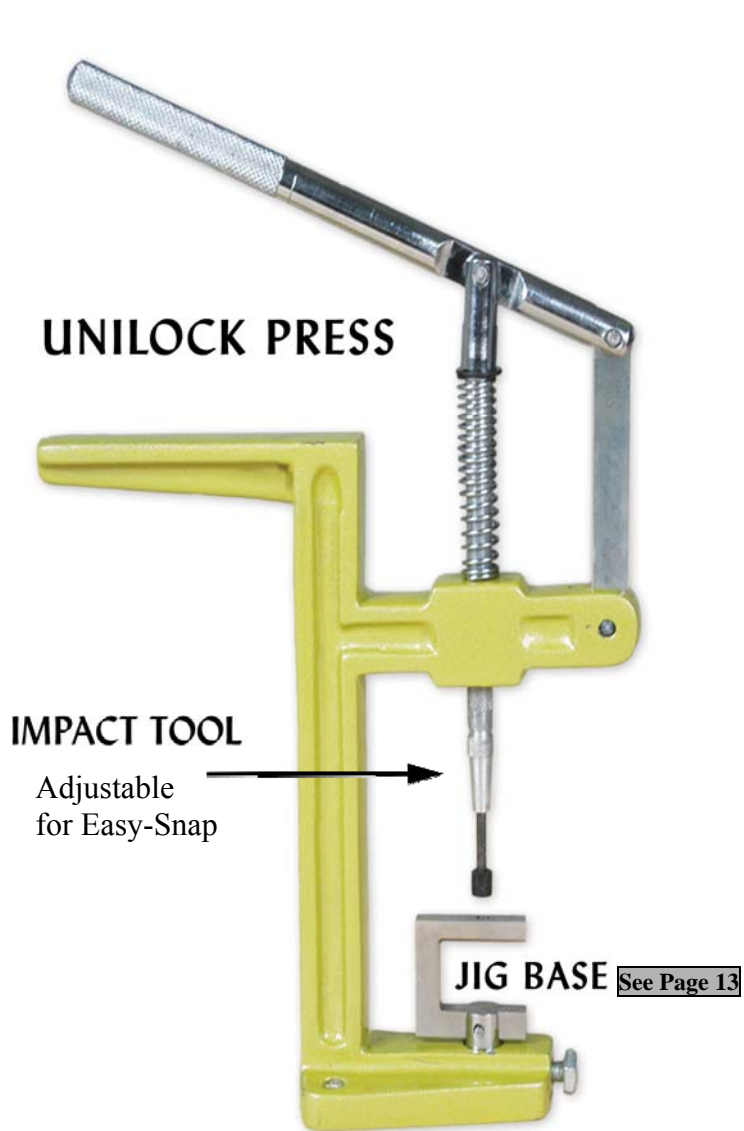
easy-snap[®]

Plus Permanent Seal



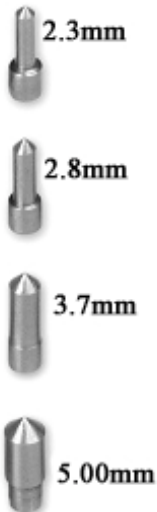




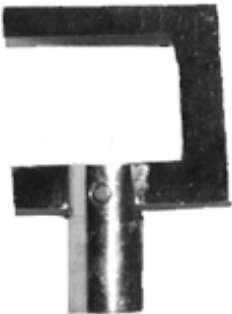
The accumulation of the sealant enlarges the barrel tube diameter permanently securing the UNILOCK forever

UNILOCK PRESS WITH IMPACT TOOL AND UNIVERSAL JIG BASE

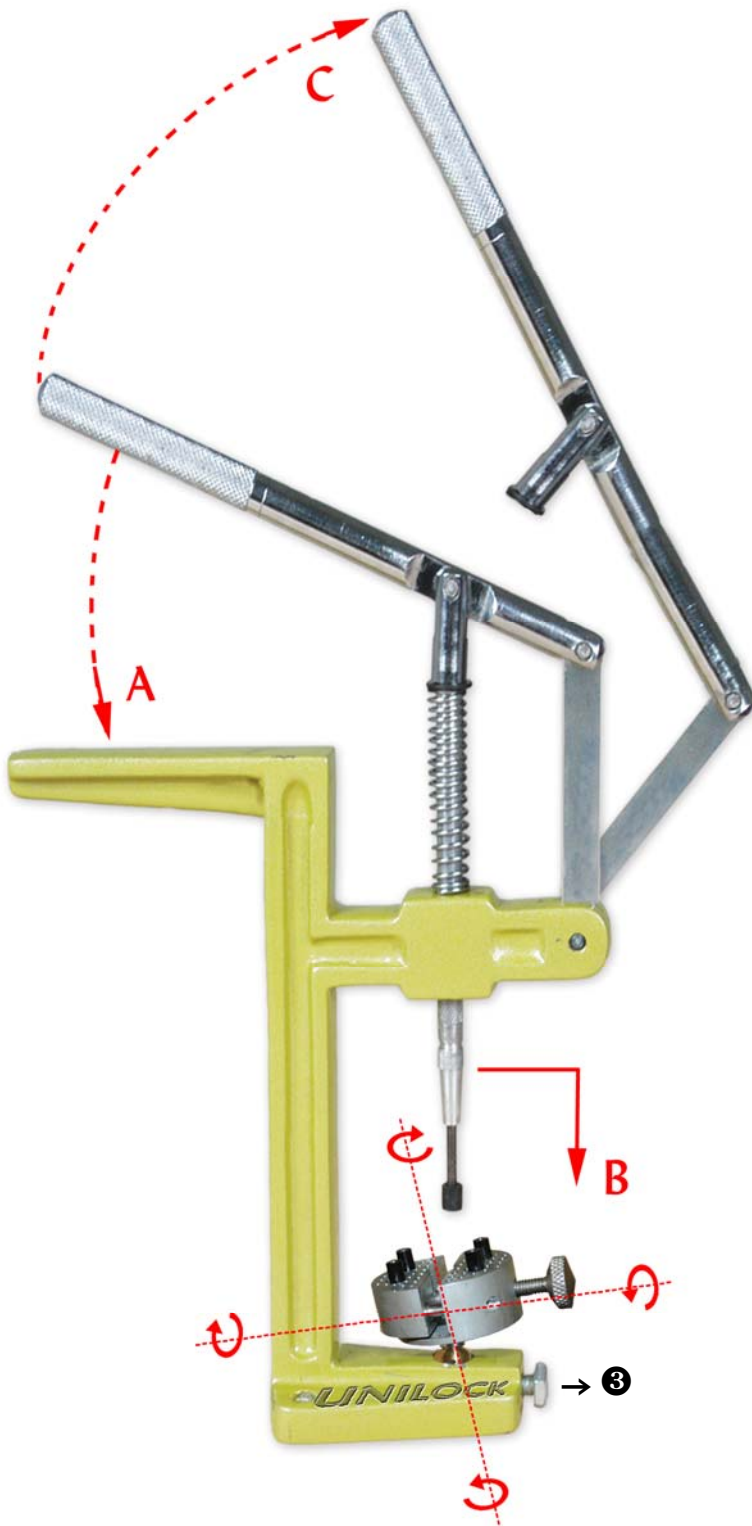


The Unilock Press can be screwed half-way out from the edge of the bench in order to accommodate bangles and other large rounded forms that can rest with their top part over the jig base and the lower part hanging under the press. Jig base supports are needed for this operation. See next page for a list 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. This system can adequately cover 80% of the entire spectrum of shapes. For any different jewelry shape not covered, SST will develop the right support for the customer.</p>	<div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <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> </div> </div>
	<div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>The Concave support is used for round or semi-round forms.</p> </div> </div>
	<div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>The half round support is used for rings and other curved forms.</p> </div> </div>
	<div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>The flat disc support is used for flat forms, stampings, charms, link bracelets etc.</p> </div> </div>
	<div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <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> </div> </div>
	<div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>The Jig Base is U-shaped to accommodate the bottom of a ring shank, bracelet or any large tube earring.</p> </div> </div>

UNILOCK PRESS FOR EASY-SNAP ® WITH INCLINABLE HOLDER



How to remove the Impact Tool:

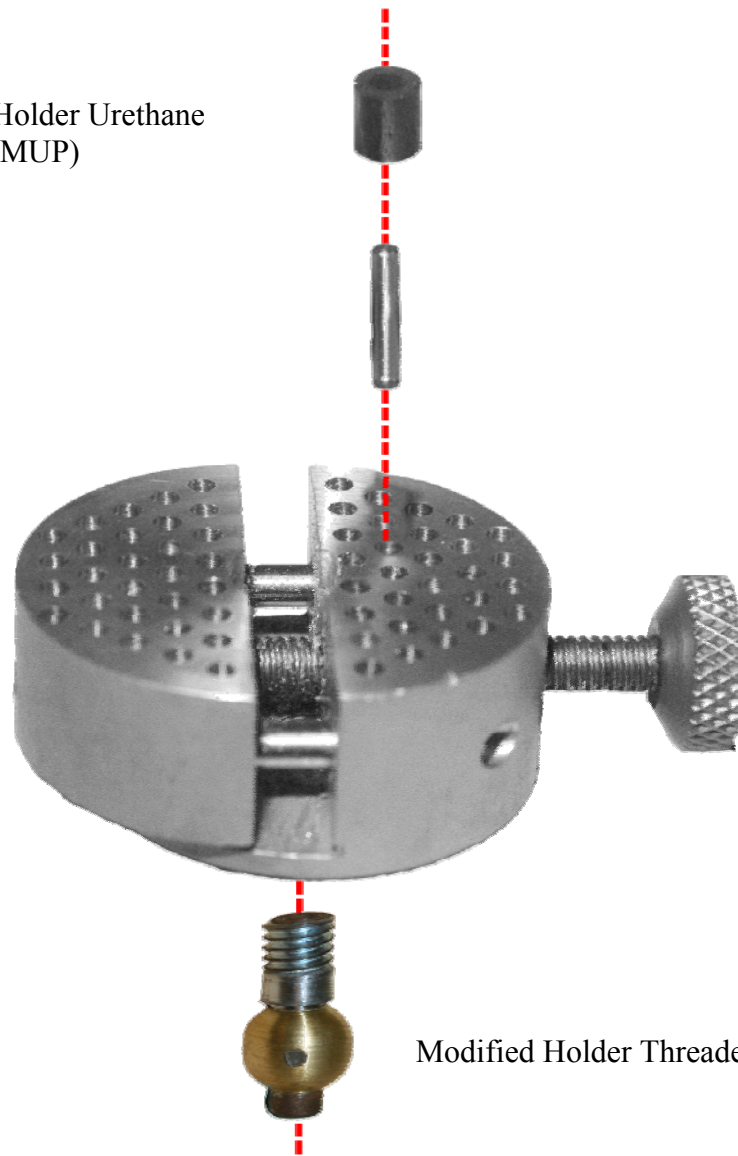
- A - Press the Lever all the way down.
- B - Hold the bottom shaft of the Impact Tool.
- C - Pull the lever handle all the way up and away.
- Now you can Pull the Impact Tool up and out from the press.

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 19

REQUEST FOR NEW UNILOCK APPLICATION
(Protected by Absolute Confidentiality & Non-Disclosure)

Please contact us at any time for the fastest way to personalize your product with
the Unilock:

Company Name: _____

Address: _____

Provide our Research & Development Department with the following technical
information so that we can facilitate transforming your creativity into a jewelry
item:

Type of product to be developed: _____

Fabricating material of the product: _____

Type and size of your gemstones to be utilized: _____

Birthstone program: _____

Zodiac, Emblem, Logo _____

The new capability of your company to personalize the jewelry and gift products as
per your customers' precious Life defining moment is the reason for our business.

UNILOCK ORDER SHEET

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

Other Gems and Diamonds	Gem Size	Unilock Model	Type of Metal	Application	Tube Type	Quantity

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.

PRODUCT PROFILE

Unilock is the most advanced preset system in the world that differs completely from any other system used until now. Those differences are defined by the “Summary of the Invention” of our US Patent No. 6668584.

The utilization of the Unilock on setting gems is without restrictions, essentially any presetted gem into the Unilock is easily used over any metal, material or product as fast as a nail is used in construction work, but with precision, quality and reliability never achieved by any other gem setting system.

Today the Unilock makes it possible to set gems into the hardest non-solderable jewelry material and into gift products as well, that were not suitable before for any gem setting.

The Unilock ranges of applications are unlimited from Jewelry to Electronics; between the many, one is worth to be mentioned as a tribute to its versatility, quality and reliability. The Unilock was selected by the giant TV manufacturer “Philips” as a symbol of their excellence by the sale of their One Millionth Ambilight FlatTV. The TV was encrusted with 2250 diamonds set into 2250 Unilocks for the world to see all thru the rest of the year 2007 this combination of class and elegance set into a FlatTV.

UNILOCK PRODUCTION SUPPORT APPLICATION (19)

AVAILABLE FROM STONE SET TECHNOLOGIES

- 1) The *Unilock Press and Impact Tool* with Universal Jig Base and jig supports – Pages 5, 12, 13 - 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 8
- 3) *Calibrated Ball* (CB) – page 8
- 4) *Impact Tool Urethane tip replacement* (IUT) – page 10
- 5) *Impact Tool Cup Tips* – page 10
- 6) *Inclinable Modified Holder Parts* – page 15
 - 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 15:
Rio Grande #113-089 www.riogrande.com 1.800.545.6566

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TOLL FREE: 888.201.3586

FAX: 954.565.4931

MAIL:

P.O. BOX 48020

FT. LAUDERDALE, FL 33348

WWW.STONESETTECHNOLOGIES.COM

DELIVERIES:

3532 N. OCEAN BLVD. 2ND FLOOR

FT. LAUDERDALE, FL 33308

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