



## Jeweler Point Carver Instructions

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**Read the “SAFETY FIRST” section before you operate this machine!**

### **SAFETY FIRST:**

**Note:** These safety precautions apply to any powered rotating axis. A simple example would be a drill press.

1. Know how to turn the spindle off before you turn it on!
2. Do not wear loose fitting clothing, or gloves when you are operating this machine. Loose fitting clothing and gloves may get caught on the spindle which will then pull that item “and You” into the holder as they are wrapped around the holder.
3. Keep Long hair tied back or in a hat or head cover that will keep it away from the holder and the spindle. Long hair may also get caught on the spindle or holder while it is turning. This may result in your hair wrapping around the holder which will then pull your hair out or your head towards the holder.
4. If for any reason a holder should become bent, discard the holder and replace it. A bent holder will no longer be balanced, it will no longer run concentric to the spindle, and will become dangerous to use.
5. Make sure that the Morse #1 taper on the end of the holder and the taper in the spindle are clean and free of any chips or other material particles whenever you mount the holder into the spindle. Any chips or material particles that are on the taper will cause a poor taper fit. They will also cause an “out-of-round” run out of the holder.
6. Whenever you mount a holder in the spindle be sure to do the following:
  - A. Secure the holder into the Morse taper with the draw bolt.
  - B. Turn the spindle by hand using the spindle pulley and check the holder for run out due to a poor fit in the taper.
  - C. If there is excessive run out, remove the holder from the spindle and check the Morse taper on both the holder and in the spindle for any chips or particles. Then reinsert the holder into the spindle and secure it with the draw bolt.
  - D. If the holder is mounted correctly and running true when you turn it by hand then do the following:
    1. Turn the speed control knob down (counter clockwise) to the slowest speed.
    2. Turn the power toggle switch on.
    3. Turn the spindle speed knob clockwise to increase the spindle speed “slowly” and again check for any run out or unbalance (vibration).
    4. If all looks and sounds good, you can start using your Point Carver.

**NOTE: The maximum safe rpm for these holders is 2800 rpm.**

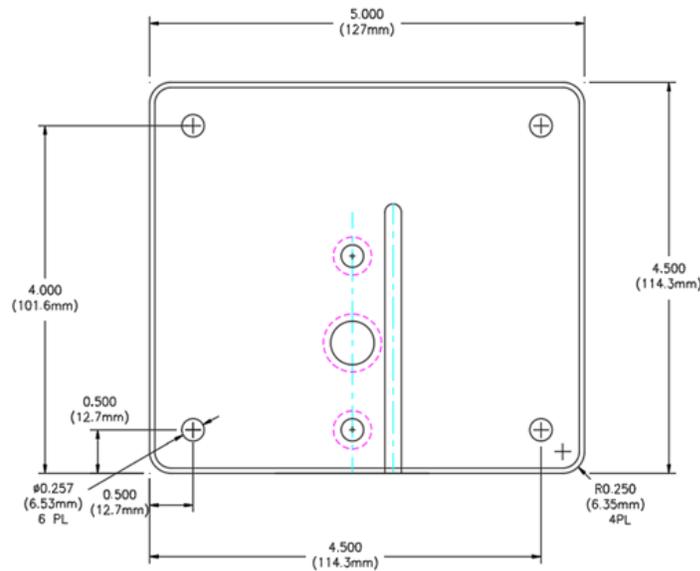
Our Jeweler Point Carver System was designed to be used with the headstock, motor, and speed control that is the heart and soul of our machines. These headstock/motor assemblies have been tested and proven for over 50 years.

You can either purchase a complete system, or if you already own one of our machines, you can use the headstock/motor assembly from your existing machine (if it is our Morse#1 Headstock).

The point carver base is designed to be used with either our standard Morse #1 Headstock p/n 30100 which comes on most of our machines, or our Square Flat Base Headstock p/n 6523. The 30100 headstock mounts to the base using the same pivot pin and head key that is standard on our machines. The 6523 headstock uses (2) 1/4-20 socket head cap screws.

The base is 5" x 4.5" x 3/4" ( 127mm x 114mm x 19mm) Aluminum with (4) corner mounting holes for either 1/4" or 6mm screws.

### Base mounting hole dimensions:



We make (4) different point carver holders.

1. We make (3) 8" (203mm) long holders that are designed to hold burs and other tools. These holders come in sizes 3/32" p/n 2053, 1/8" p/n 2055, and 3mm p/n 2056.
2. We make a shorter 5" (127mm) long Chuck Holder p/n 2057 that comes with our 1/4" drill chuck p/n 11900. This holder is for holding other tools that do not have a standard size shank.
3. All of these holders have a Morse #1 taper shank which fits into the Morse #1 taper that is in the headstock spindle. The holder is then secured in the headstock spindle with a 1/4-20 draw bolt.

### Mounting Instructions for the Holders:

The picture below shows all of the major components of our Jeweler Point Carver System. The headstock mounts to the base with the front of the headstock flush with the front side of the base. (see pic 4216)



Pic 4216

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**Point Carver parts:**

**Part#: Part Description**

3306	Sherline Standard Morse #1 Taper Spindle Headstocks W/ C3 bearings, DC Motor & Speed Control
6523	Square Headstock w/Flat Base
20501	Jeweler Point Carver "Base"
20503	Jeweler Point Carver " 3/32" Holder"
20505	Jeweler Point Carver " 1/8" Holder"
20506	Jeweler Point Carver " 3MM Holder"
20507	Jeweler Point Carver " Chuck Holder"
20502	Pivot Pin Spacer
11900	1/4" Drill Chuck Body
11860	1/4" Drill Chuck Key

**#1 Morse Taper Remover parts: Complete assembly p/n 1156**

11561	Spindle Taper Removal Ring
11562	#1 Morse Release Ring "Spacer"
11824	(2) Shim Washers
40580	(2) Tommy Bars

Thread the Spindle Taper Removal Ring p/n 11561 onto the spindle thread until it touches the spindle shoulder. (see pics 4217, 4218)



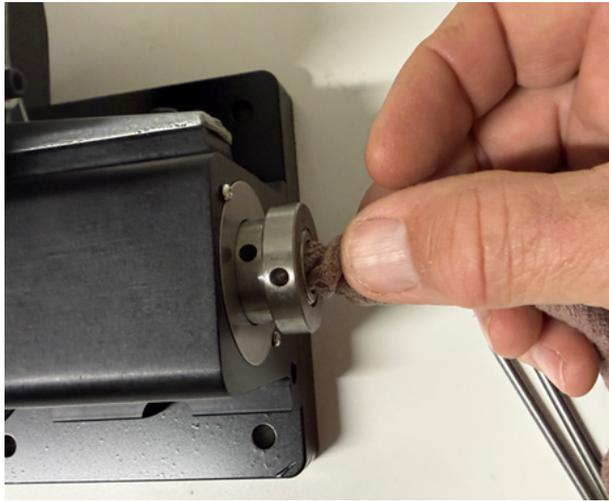
*Pic 4217*



*Pic 4218*

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Clean the Morse #1 taper in the spindle. (see pic 4219)



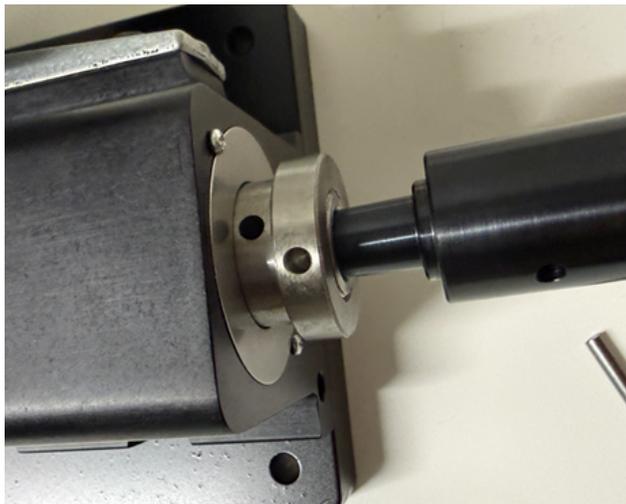
*Pic 4219*

Clean the Morse #1 taper on the holder. (see pic 4220)



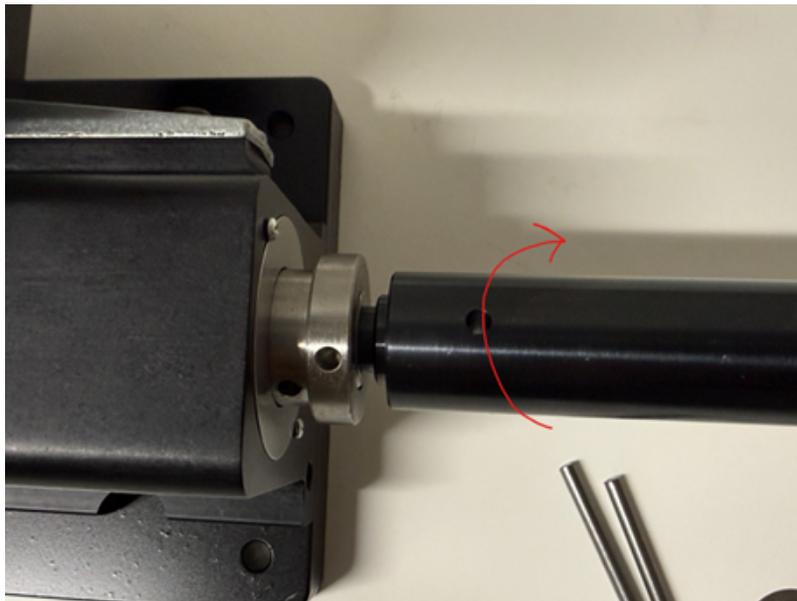
*Pic 4220*

Place the Morse taper of the holder into the taper in the spindle. (see pic 4221)



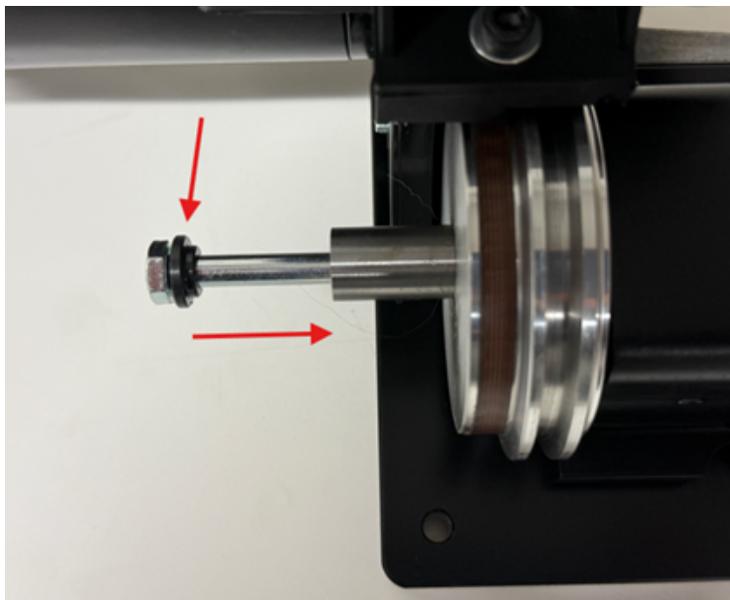
*Pic 4221*

When the two tapers begin to make contact with each other. Hold the spindle still with your left hand on the spindle pulley. Then turn the holder as if you were threading it into the spindle while pushing the holder into the spindle. The two tapers will lock up as if they were threaded together. Now the taper-to-taper fit is secure and both parts are connected via the taper. (see pic 4223)



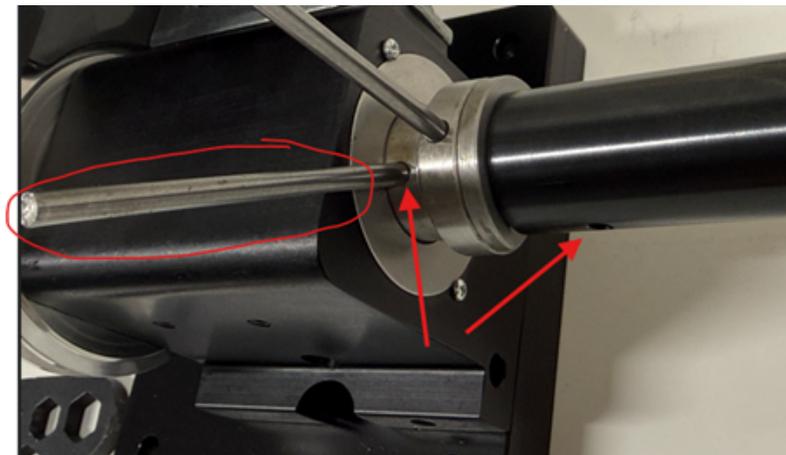
*Pic 4223*

Now insert the draw bolt (with the washer) into the back of the spindle. (see pic 4224)



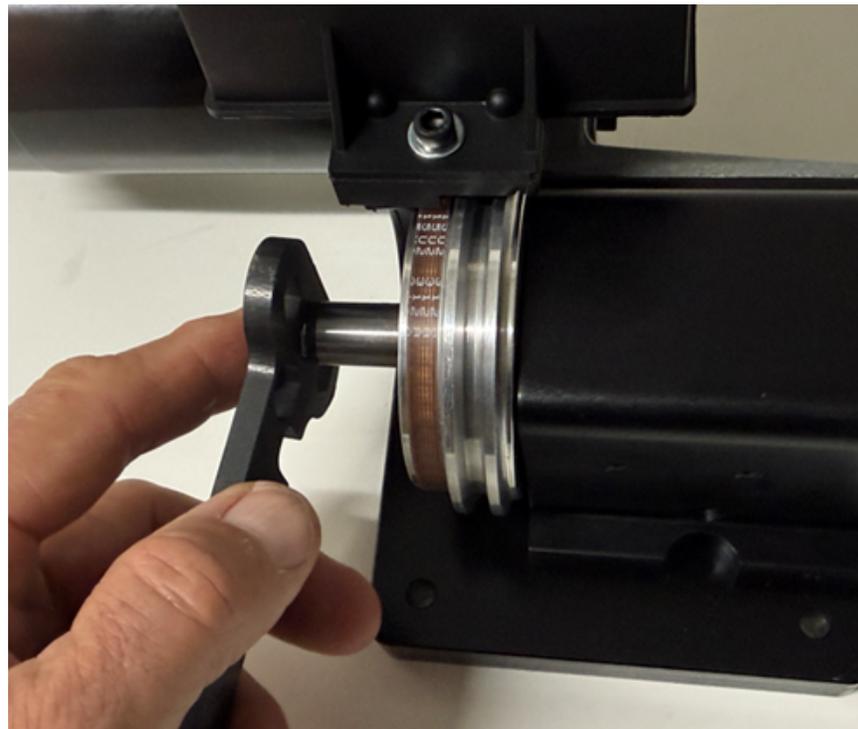
*Pic 4224*

Once the draw bolt and washer are threaded all the way into the holder and the bolt washer is flush with the backside of the spindle. Insert one of the Tommy Bars either into the Tommy Bar hole in the spindle collar or into the Tommy Bar hole in the holder. (see pic 4233)



*Pic 4233*

Keep the spindle and holder from turning with the Tommy Bar. Then tighten the draw bolt with a wrench. (see pic 4226)  
**Big Note:** Only tighten the draw bolt until it is snug. Do not over tighten the draw bolt, or the taper-to-taper fit of the holder will become very tight. This will make it harder to remove the holder.



*Pic 4226*

Now your holder is securely mounted to the spindle. Referring back to #6 of the “safety first” segment turn the spindle by hand to check for excessive run out. If everything looks good, turn the spindle speed control knob all the way counter clockwise (see pic 4421). Then turn on the power toggle switch. Then increase the spindle speed slowly while checking for any run out or excessive vibration.

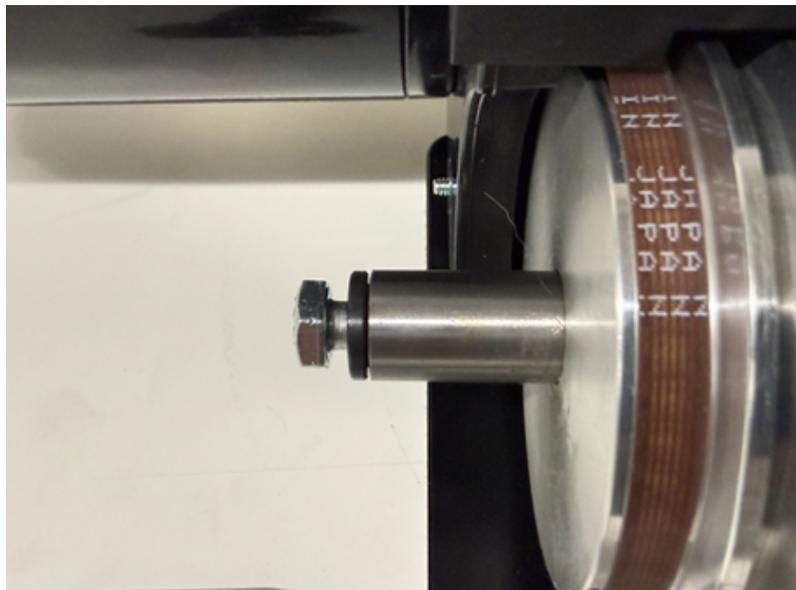


Pic 4421

**NOTE: The maximum safe rpm for these holders is 2800 rpm. 2800 rpm is the maximum speed that our DC motor and speed control can obtain. If you change the motor and speed control to a different motor and speed control, the maximum safe rpm is still 2800 rpm. Do not exceed 2800rpm!**

**Removal Instructions for the Holders:**

Loosen the draw bolt two or three turns. Be sure to leave the draw bolt washer in the end of the spindle. (see pic 4228)



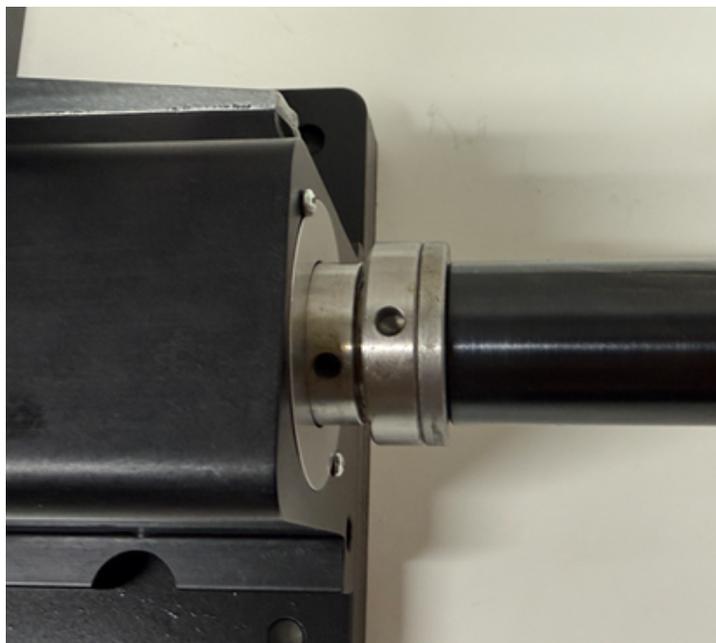
Pic 4228

Place the p/n 11562 #1 Morse Release Ring Spacer between the Removal Ring p/n 11561 and the holder. (see pic 4230)



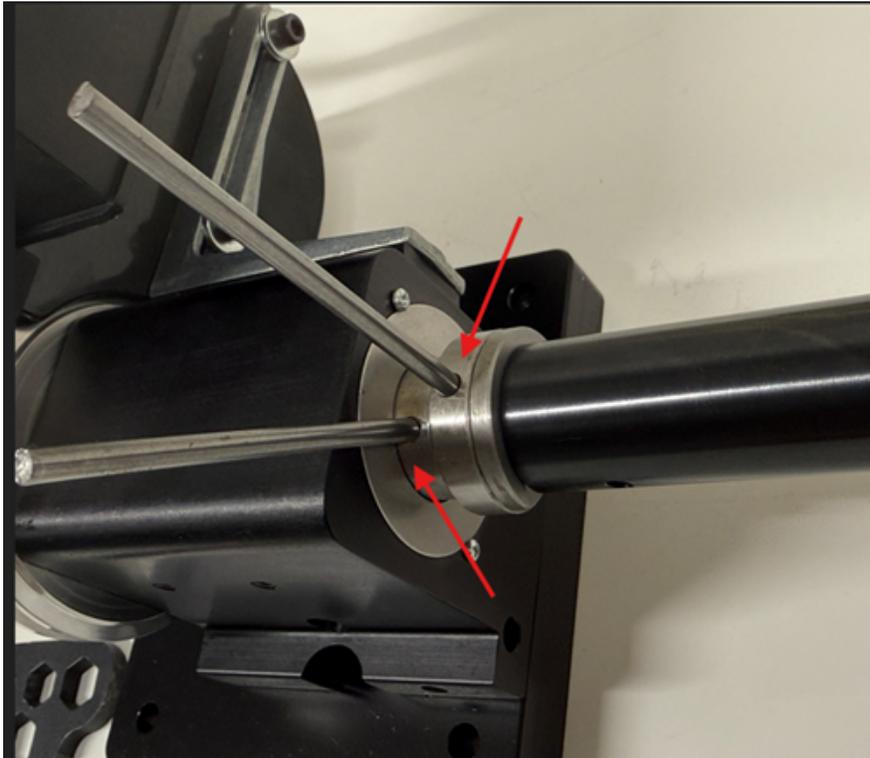
*Pic 4230*

Thread the Removal Ring out until it pinched the Spacer between the ring and the holder to hold the spacer in place. (see pic 4232)



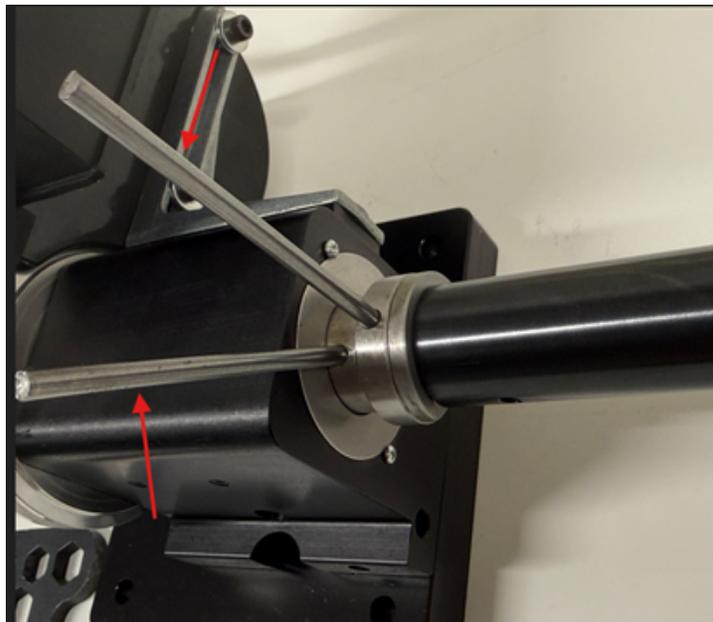
*Pic 4232*

Now insert one tommy bar p/n 40580 into the tommy bar hole in the spindle collar and one into the closest tommy bar hole in the removal ring. (see pic 4233)



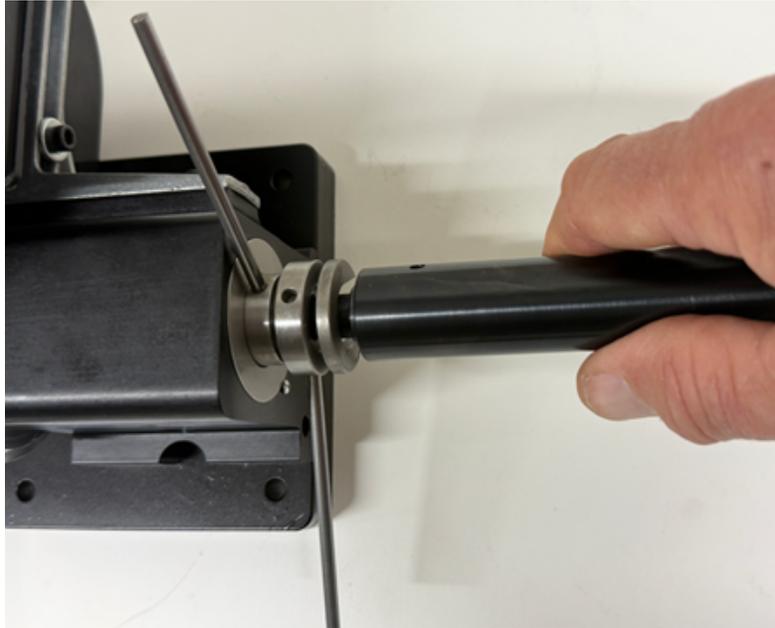
*Pic 4233*

Now pull the tommy bar that is in the removal ring CCW towards the tommy bar that is in the spindle until the taper end of the holder breaks free from the spindle taper. (see pic 4234)



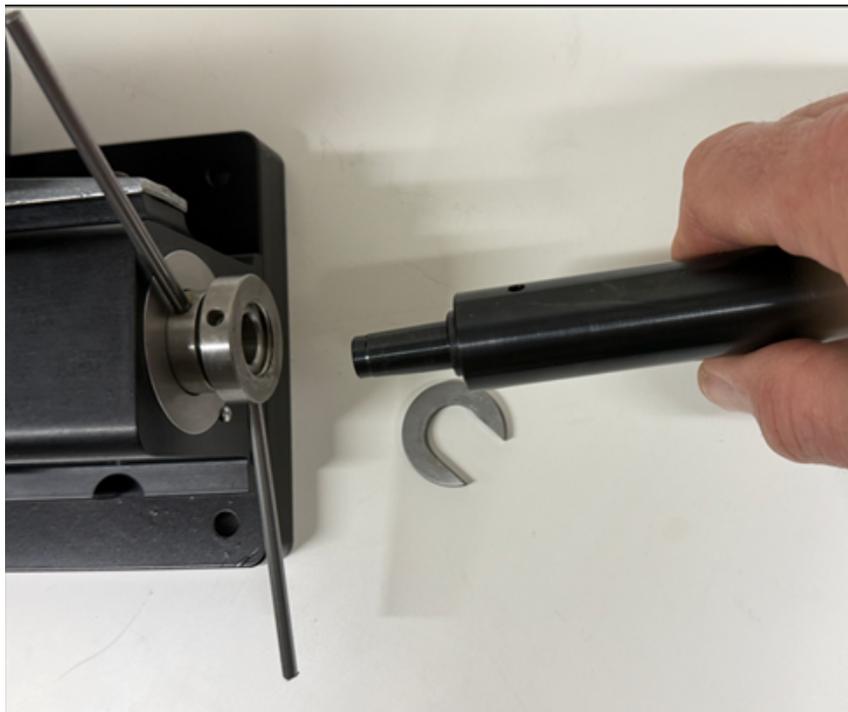
*Pic 4234*

It will take a fair amount of force to release the holder from the spindle taper. If it takes excessive force to remove the holder, that means that you tightened the draw bolt too much when you mounted the holder. Use less force on the draw bolt the next time when you mount your holder. (see pic 4235)



*Pic 4235*

Hold onto the holder while you unthread the draw bolt and pull the holder out of the spindle, (see pic 4236)



*Pic 4236*

and mount it on the point carver base to use it with the point carver holder to work on your jewelry.