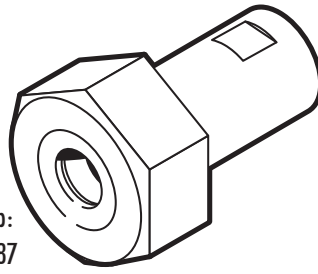


Knurled Cap:
P/N 2085
P/N 2086



Hex Cap:
P/N 2087
P/N 2088

**SHERLINE
PRODUCTS**
INCORPORATED 1974

WW Collet Tailstock Adapters

P/N 2085, 2087 (Sherline WW)

P/N 2086, 2088 (8 mm WW)

About the WW Collet Adapters

The purpose of the WW collet adapter is to allow the use of WW collets in the lathe tailstock. We decided to add this product to the accessory line based on the requests of several watchmakers. They have a need to drill very small holes with the accuracy only a collet can provide. A drill of only a few thousandths of an inch in diameter is easily broken if not perfectly centered. To accomplish this level of accuracy on a Sherline lathe, a little extra time must be spent to “perfectly” align the machine. When you consider the alternative is to spend thousands of dollars for a jeweler’s lathe that is far less versatile, we think you will find it is time well spent.

We also offer a collet adapter with a hex retaining cap (P/N 20871) for those that want to hold the collet adapter in our 5/8" Gang-Tool Post mounted on our Chucker Lathe. The hex cap is more easily tightened using a 1" hex wrench (P/N 65025) than the knurled cap can be by hand. Using a wrench allows you to tighten the retaining cap tight enough to keep the drill from moving or spinning in the collet when drilling into your part.

piece of round material about 5/8" (16 mm) diameter by 3" (76 mm) long in the 3-jaw chuck, turn the outside diameter to round and face the end with a sharp cutter. Measure the taper that has been cut and eliminate it by moving the headstock with light taps from a mallet and taking another test cut until any error is eliminated.

You now must make the choice of whether you want the headstock to remain removable. A simple way to “lock it in” is to use Locktite® on the keyway. Make sure the alignment key and keyway are free from oil before aligning the headstock. After alignment, turn the lathe on end and place a few drops of thread locking compound into the keyway. The headstock can later be loosened by prying with a screwdriver blade in the slot between the bottom of the headstock and the lathe bed when viewed from the headstock end.

Another method would be to pin the headstock to the bed with 1/8" dowel pins after alignment. To do this, carefully remove the base from the lathe and drill and ream two 1/8" holes about 2.5" (63 mm) apart through the bed and into the headstock. You must do this without moving the headstock on the bed. The headstock can be removed this way, although it is a little more difficult than using just the keyway. When it is reinstalled, however, it should align closer than with the standard keyway.

Our opinion is that you will give up more than you gain if you lock down the headstock, as most work can be accomplished with the standard keyway alignment. However, if the ultimate in accuracy is your goal, the choice is up to you.

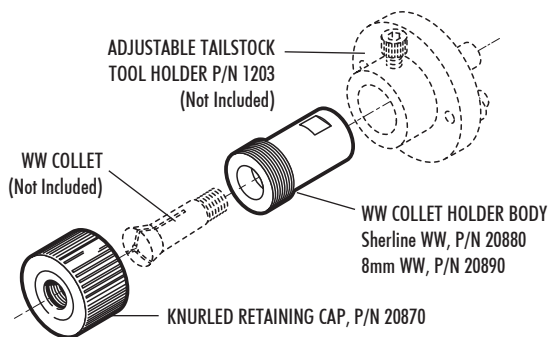


FIGURE 1—A Hex Retaining Cap (P/N 20871) is available for those who want to mount the collet adapter to a 5/8" tool holder (not shown).

Aligning the Headstock

Begin by aligning the headstock with the bed. Loosen the headstock and push it back evenly against the alignment key (located under the headstock) and retighten. Put a scrap

Aligning the Adjustable Tailstock Tool Holder

The adjustable tailstock tool holder (P/N 1203) is designed to allow minute adjustment of the tailstock center. Complete instructions on how to accomplish this adjustment are included with that accessory.

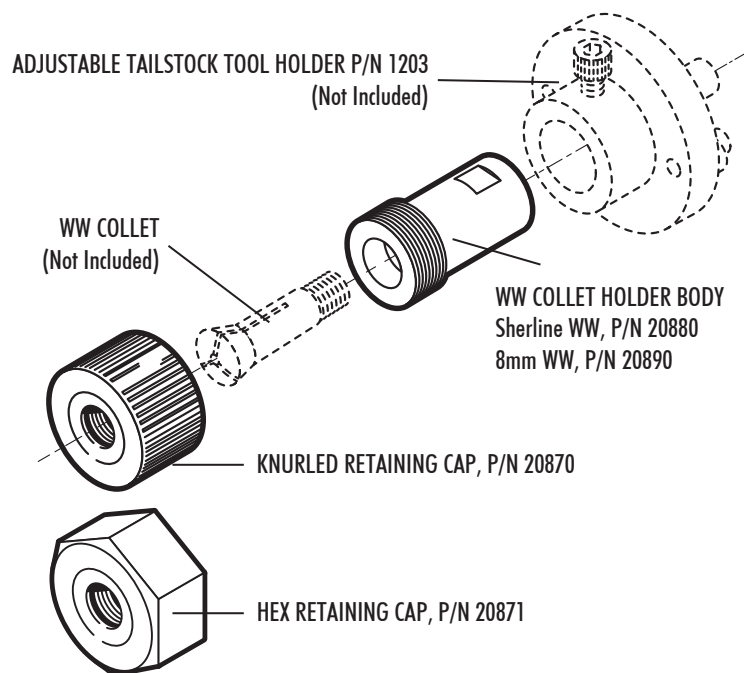
With the headstock in alignment, a dial indicator can be used to “indicate in” the WW collet. (See “Use of a Dial Indicator” section in the Sherline Instruction Guide.) Another method would be to turn a short length on the end

of the sample stock down to 1/16". Then chuck up a piece of 1/16" material in a 1/16" WW collet held in the adapter. Bring the ends of the two pieces of material right up to each other and, using a magnifying glass, align the ends by eye.

The collet adapter comes in two sizes: Sherline WW and 8 mm. The difference between them is .002" diameter on the barrel part of the collet. The Sherline WW is .313" diameter and the 8 mm is .315" diameter.

We believe micro-machinists and watchmakers will find this accessory to be most useful. By using this simple tool and a little time, you can duplicate the accuracy of a machine costing many times more, yet still retain the great versatility offered by your Sherline Lathe.

Thank you,
 Sherline Products Inc.



Parts List

NO. REQ.	PART NO.	DESCRIPTION
P/N 2085		
1	20880	Sherline WW Adapter Body (Inch)
1	20870	Knurled Retaining Cap
P/N 2086		
1	20890	8mm WW Adapter Body (Metric)
1	20870	Knurled Retaining Cap
P/N 2087		
1	20880	Sherline WW Adapter Body (Inch)
1	20871	Hex Retaining Cap
P/N 2088		
1	20890	8mm WW Adapter Body (Metric)
1	20871	Hex Retaining Cap