

# MORGAN PIVOT POLISHER

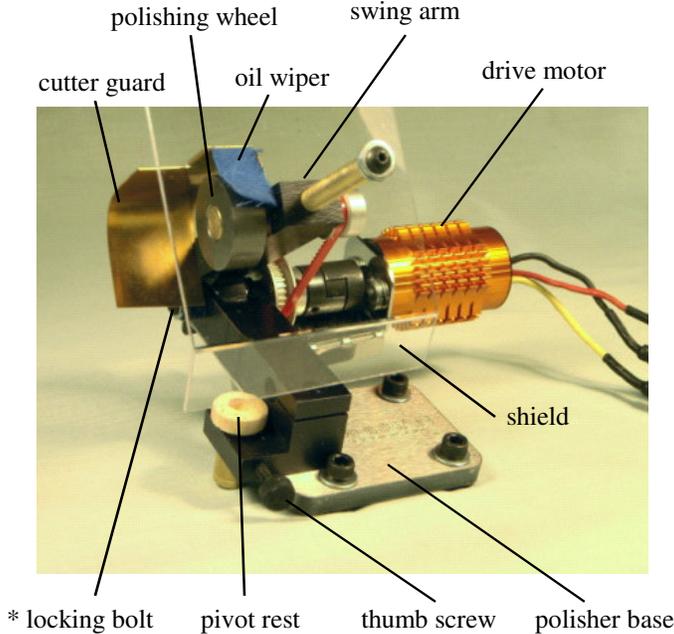


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[www.morganclock.com](http://www.morganclock.com) [www.morganpivotpolisher.com](http://www.morganpivotpolisher.com)

**MADE IN UNITED STATES  
OF AMERICA !!**



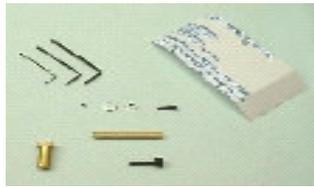
## PARTS AND ADJUSTMENTS FOR THE MORGAN PIVOT POLISHER



**\* You can preload the swing arm by tightening this bolt; this will take any end-play out of the swing arm.**

After opening the box, you will find a bag containing parts.

- 1) allen wrenches - 3
- 2) shield standoff - 1
- 3) shield - 1 (not in bag)
- 4) pivot rest - 1
- 5) thumb screw - 1
- 6) 1 - set screw,
- 2 - #6 washers
- 1 - button head bolt
- (inside small bag)

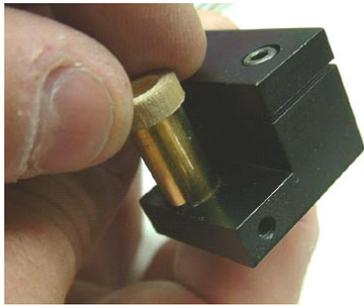


Make sure all these parts are enclosed.

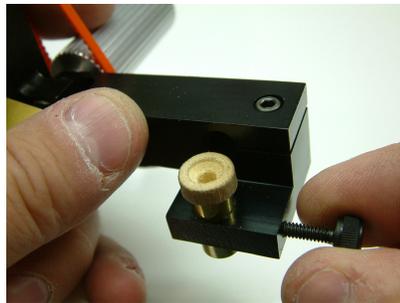
### PLEASE READ THROUGH THE INSTRUCTIONS BEFORE INSTALLING ON YOUR LATHE.

#### INSTALLING PIVOT REST

1: Slide the pivot rest into the hole.



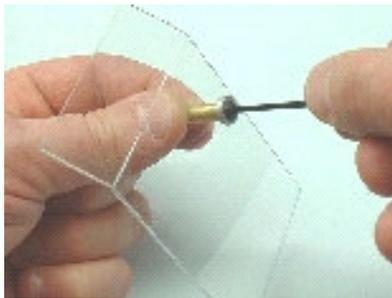
2: Screw the thumbscrew into the Morgan Pivot Polisher until it snugs the pivot rest.



#### ASSEMBLING THE SHIELD

The guard has a protective cover - remove it!

1: Place one #6 washer on the button head bolt. Slide the bolt through the hole in the shield then place the other #6 washer onto the bolt. Now tighten the bolt into the shield standoff to secure the shield. Set the shield aside for now.

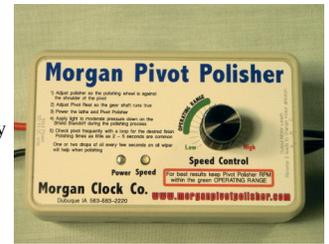


2: Start the setscrew into the swing arm.



#### POWERING YOUR MORGAN PIVOT POLISHER

It is best to use a small 12 volt battery ( lawn tractor ). Some power supplies may work but most will not, because the dc speed control needs a constant flow of power to work properly. Check polarity of your connection, if connected wrong it may burn out the speed control.



When polishing stay within the shaded "Operating Range" for speed, you may exceed it but our tests have shown that range works best.

If the polisher suddenly stops it may have gotten too hot or it may have been overloaded due to too much down pressure on the pivot; simply turn the speed control knob all the way down ( left ) wait a few seconds and slowly power up the polisher to the desired speed. If the polisher stops because of it getting too hot let the polisher sit and cool down for a couple of minutes. Keep vent holes open for better ventilation.

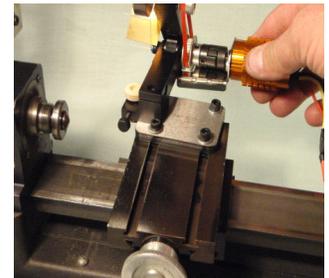


The MORGAN PIVOT POLISHER was not designed for constant use and it will get warm with normal use.

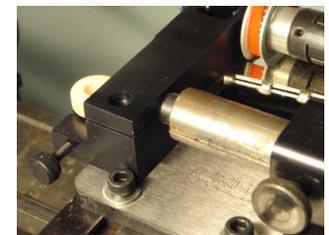
#### INSTALLING THE MORGAN PIVOT POLISHER

\*\*If you are using a watchmakers's lathe, please go to page 4, the watchmakers's lathe setup instructions.

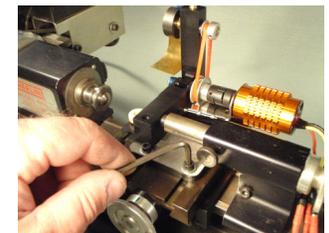
1: Slide the T-nuts into the T-slots of the cross slide.



2: Place the tailstock with a dead center into the hole as pictured and tighten the tailstock to the lathe bed. Now screw the tailstock shaft into the pivot polisher hole, this will move the T-nuts to the left of the cross slide and this will center and square the pivot polisher with the headstock.



3: Now that you have the polisher base plate in position, tighten the 3 bolts using the wrench that tightens your tailstock.



4: Slide the shield standoff into the mounting hole in the swing arm, position the shield and tighten the setscrew to hold it in place.



\*\*Some trimming and bending of the shield maybe required to suit your setup.

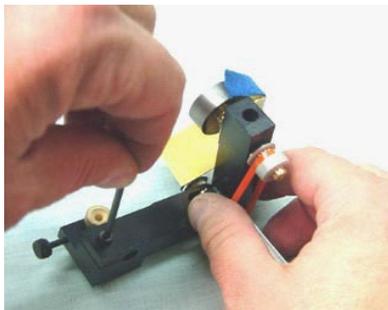
**Continue with installations page 5.**

**That's it! You are ready to start polishing better and faster with the**

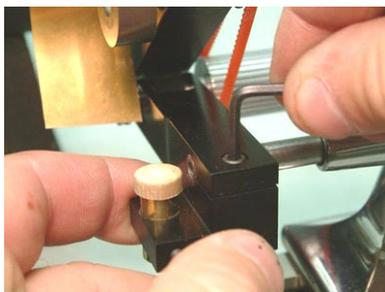
**PLEASE READ THROUGH THE INSTRUCTIONS BEFORE  
INSTALLING ON A WATCHMAKERS LATHE.  
REFER TO THE PICTURES**

**INSTALLING THE MORGAN PIVOT POLISHER  
ONTO A WATCHMAKERS LATHE**

A: Remove the polisher base and install the locking bolt.



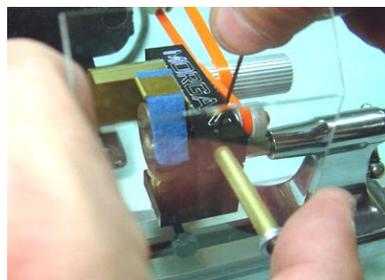
B: Slide the pivot polisher onto the tailstock of your watchmaker's lathe and tighten the locking bolt to secure the pivot polisher.



**PLEASE NOTE:** This polisher was designed for the Marshall-Pearless watchmaker's lathe with a .300 dia tailstock arbor. If you want to use a different size shaft to install the polisher, please call us 800-805-2220.

C Loosen the locking bolt. Twist the pivot polisher on the tailstock for better visibility.

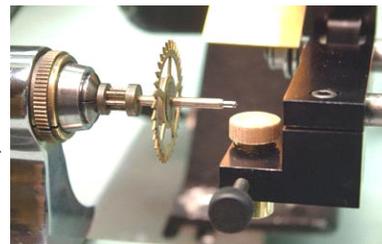
D: Slide the shield standoff into the mounting hole in the swing arm, position the shield and tighten the setscrew to hold it in place.



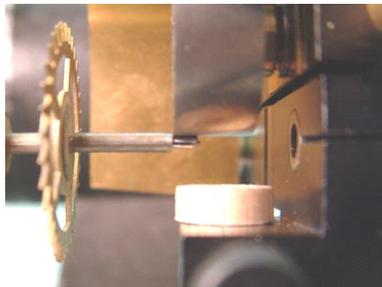
**Continue with installations page 5.**

**USING THE  
MORGAN PIVOT POLISHER**

A: Mount your gear in the headstock with a collet, bezel chuck, or best means possible.



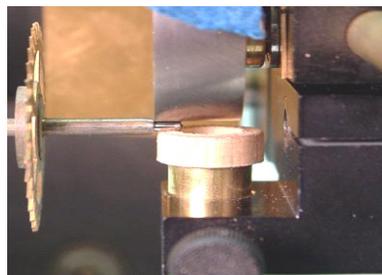
B: Adjust the polisher so the polishing wheel is positioned against the shoulder of the gear shaft and covers the pivot face.



C: Adjust the pivot rest so the gear shaft runs true. Tighten the thumbscrew to hold the pivot rest in position. The pivot will rest against the pivot rest during the polishing process.

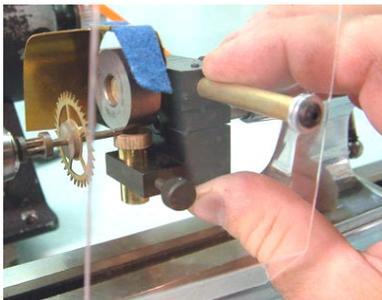


**NOTE:** Adjust the headstock and tailstock so the pulley on the drive shaft will run straight with the motor.

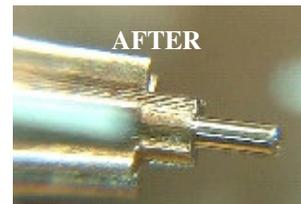


D: Power the lathe and polisher. Apply light to moderate down pressure on the top of the shield standoff for the polishing process. Light side pressure can also be applied for pivot shoulder polishing. One or two drop of polishing oil every few seconds on the pivot and oil wiper will help when polishing.

**NOTE: Keep the oil wiper saturated to get the best results.**



Check the pivot frequently with a good loop ( 10 power is best ) for the desired finish. Polishing may vary based on the hardness of the pivot. Polishing times as little as 2-5 seconds are common.



The above pivot is the escapement wheel from a cuckoo clock. It took 5-7 seconds to polish the pivot.  
Viewed through a 10x loop