

# MAINTENANCE OF WELLS LABORATORY HANDPIECE

Product No. H010

H800-021503

**TECHNICAL BULLETIN** 

**CAUTION:** The bearings in the handpiece and wrist joint are permanently lubricated with special compounds. If anything enters the bearings, they will be damaged. **KEEP OIL, SOLVENT AND COMPRESSED AIR AWAY** from the handpiece and wrist joint.

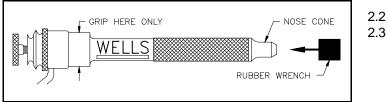
**CAUTION:** DO NOT DISASSEMBLE the handpiece or wrist joint except as described below. There are no user serviceable parts inside.

### 1.0 BREAK-IN

The Wells handpiece will run hot when first put into operation. This condition may last several days depending upon the amount of use. The handpiece is "run in" at the factory until the bearing grease is channeled and the handpiece is running normally. During shipping, the grease re-enters the bearing races and cause the handpiece to run hot again until the grease is re-channeled.

### 2.0 CLEANING

2.1 The Wells handpiece collet should be cleaned once a month.



## Figure 1.

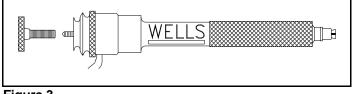
Unplug the Engine Unit power cord.

Slide the rubber wrench provided onto the nose cone and unscrew it. If the nose cone is too tight to remove by hand, use a pair of pliers over the rubber wrench. If the nose cone is still too tight, use another pair of pliers (padded with rubber or cloth) on the smooth **LARGER** diameter of the handpiece body. See Figure 1. Never use pliers on the knurled or labeled section of the handpiece body.

- 2.4 Remove the thumbscrew from the rear and pull the collet out the front.
- 2.5 Use a 3/32" drill or small burr to remove material packed in the bottom of the collet. Wash the collet, thumbscrew and nose cone in solvent. Solvent may be used on these disassembled parts only. Dry the parts thoroughly.
- 2.6 Clean the hole in the end of the handpiece shaft with a pipe cleaner (or a small cloth on the end of a burr shaft).

## 3.0 ASSEMBLY

- 3.1 Put a **THIN** film of grease or Vaseline outside the collet, on the threaded portion of the rod, on the thumbscrew threads and the nose cone threads. **DO NOT** use oil.
- 3.2 **CAUTION:** Insert the collet carefully. **IMPORTANT:** With a **VERY SLIGHT** pressure on the end of the collet, turn it slowly until it engages with the flat. See Figure 2. Slide it in until it seats into the shaft. **DON'T** force the collet.
- 3.3 Hold the collet all the way in so the threaded rod protrudes from the pulley. Engage the thumbscrew onto the threaded rod about 1/4 of a turn. See Figure 3.



COLLET -/
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- 3.4 Push the thumbscrew forward and engage the bronze threads into the pulley.
- 3.5 Insert a 3/32" shanked tool into the collet and tighten the thumbscrew.





### 4.0 ADJUSTMENT

4.1 There should be from 1/16 to 1/8" bronze threads visible between the pulley and the hub of the thumbscrew when the thumbscrew is tight on a tool. See Figure 4.

Figure 4.

- 4.2 If less than 1/16" is visible, remove the thumbscrew and return to step 8 but engage the thumbscrew onto the threaded rod 1/4 of a turn more this time. (A worn collet will require that the thumbscrew be engaged further onto the threaded rod).
- 4.3 If more than 1/8" is visible, remove the thumbscrew and return to step 8 but engage the thumbscrew onto the threaded rod a little less this time.
- 4.4 Replace the nose cone and tighten it by hand using the rubber wrench. Remove the rubber wrench. **DON'T** operate the Handpiece with a loose nose cone.
- 4.5 If the engine has a power switch, turn it off then connect the power cord to a grounded outlet.

