

WELLS

DENTAL, INC.

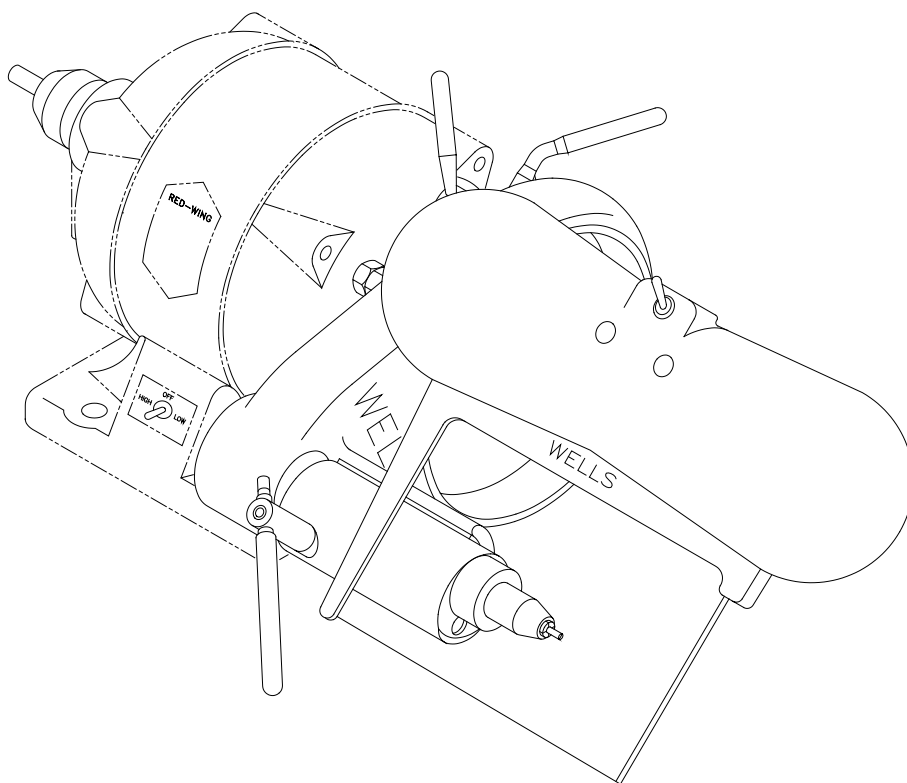
TECHNICAL BULLETIN
G800-022510

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**READ ALL INSTRUCTIONS
BEFORE PROCEEDING
SAVE THIS FOR FUTURE REFERENCE**

THIS PRODUCT IS FOR PROFESSIONAL LABORATORY USE ONLY

INSTALLATION OF WELLS GOLD CHROME BRACKET ASSEMBLY ON A RED WING LATHE



WELLS GOLD CHROME BRACKET ASSEMBLY
Product No. U011

SALES CUSTOMER SERVICE TECHNICAL ASSISTANCE
CALL TOLL-FREE: 1 800 233-0521

PHONE: (707) 937-0521, FAX: (707) 937-2809
MONDAY-FRIDAY, 8:00 a.m.-4:30 p.m. P.S.T.

DENTAL EQUIPMENT FOR TECHNICIANS WHO VALUE TIME AND QUALITY

1.0 MATERIALS REQUIRED

1.1 The Red Wing lathe should be in good running condition. If it has noisy bearings, a faulty switch or starting problems, the condition should be corrected before proceeding with the installation.

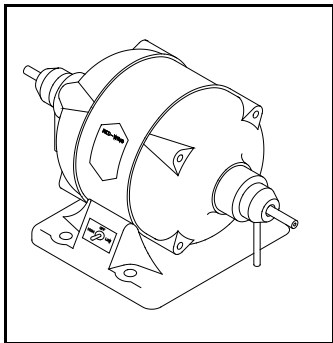


Figure 1. Red Wing lathe

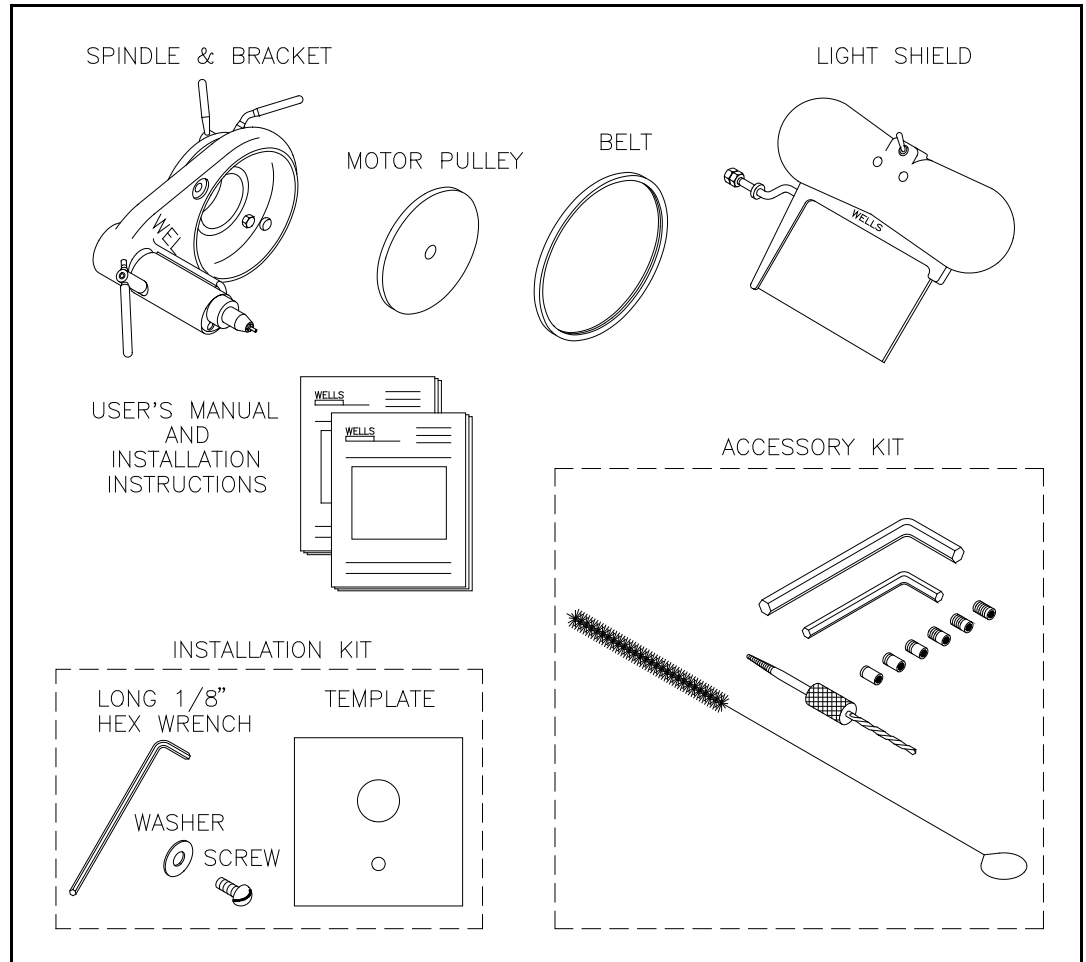


Figure 2. Carton contents

1.2 Open the shipping carton and remove the contents. Figure 2. shows the items that should be in the carton. Inspect the Gold Chrome Bracket Assembly and accessories for damage or shortages.

1.3 Two 60 watt rough service light bulbs are needed for the light shield. A two pronged electrical plug is needed for the Light Shield power cord if it is not hardwired to the lathe.

2.0 TOOLS NEEDED

2.1 1/4" straight blade screw driver, hammer, pliers, file, two 1/2" end wrenches, center punch, 0.161" (#20) HSS twist drill and 10-32 tap. Also a strip of emery cloth is needed.

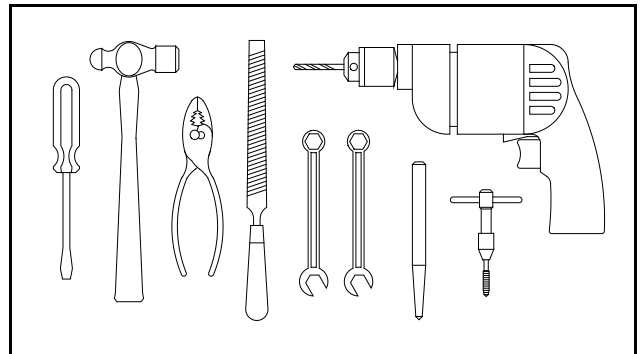


Figure 3. Tools

3.0 PREPARE THE HUB AND SHAFT

- 3.1 **UNPLUG THE LATHE POWER CORD.** Remove the red plastic hub cover and unscrew the right side throw-off. See Figure 4. If the throw-off is in two pieces, remove the set screw in the hub with the 3/32 hex wrench and remove the male threaded bushing.
- 3.2 Scrape and clean all the paint from the lathe hub.
- 3.3 Remove any rust, paint or burrs from the shaft with the emery cloth.
- 3.4 Hold the left end of the shaft wrapped in a shop towel with the pliers. File a flat on the shaft where the motor pulley set screw contacts the shaft. The flat should be at least 1/4" wide. See Figure 5.
- 3.5 Make sure the motor pulley will slide all the way onto the shaft without binding. Use the emery cloth to remove high spots. Remove the motor pulley.

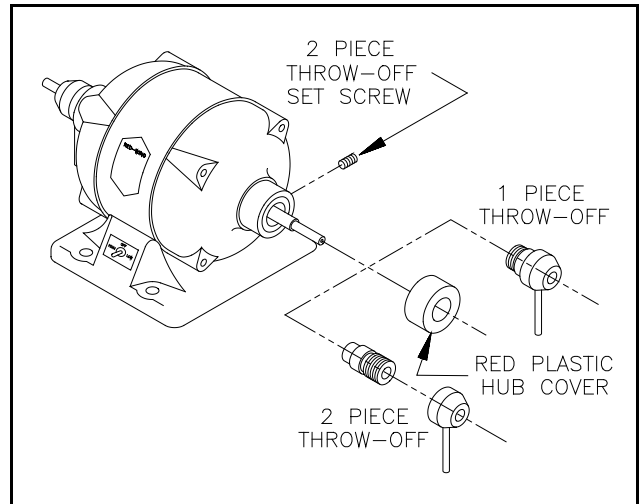


Figure 4. Right side throw-off

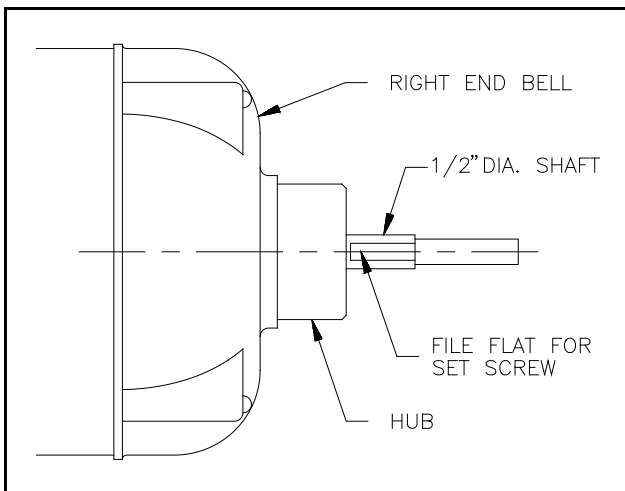


Figure 5. Hub and shaft

4.0 ATTACH THE SPINDLE & BRACKET ASSEMBLY

- 4.1 Fit the installation template over the 1/2" shaft. Position the template so the mark for the hole is down (six o'clock). See Figure 6. Center punch at the mark then drill a 0.161" dia. hole at least 1/2" deep using a #20 high speed steel twist drill. Tap the hole for a 10-32 thread.
- 4.2 Put the Spindle & Bracket Assembly onto the hub. The bracket should slide all the way onto the hub without binding. Use the emery cloth to remove high spots.
- 4.3 Tighten the height adjustment handle. Install the flat washer and screw into the hole that was tapped to retain the bracket. See Figure 7.

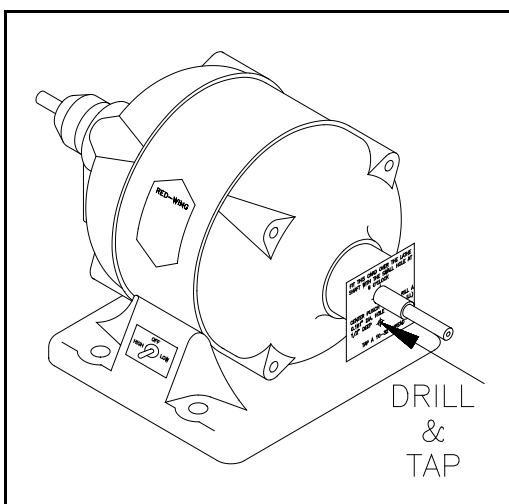


Figure 7. Template

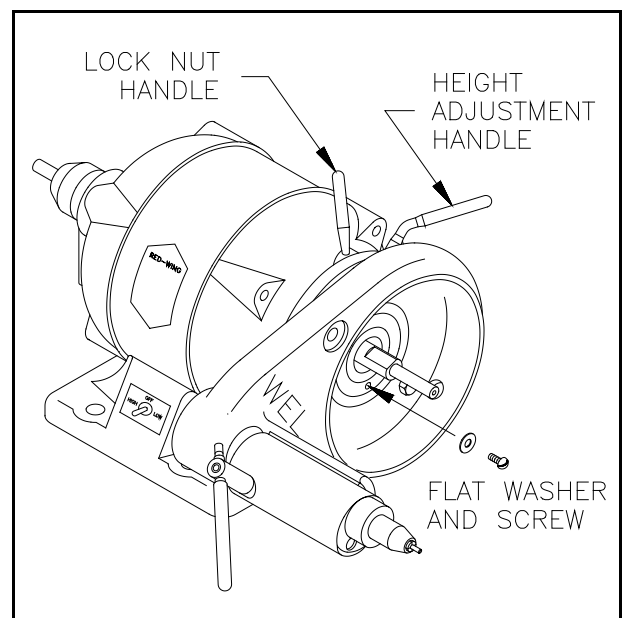


Figure 6. Attach the Bracket Assembly

5.0 INSTALL THE MOTOR PULLEY AND BELT

- 5.1 Loosen the lock nut handle and center the large hole in the bracket with the shaft so it will accept the pulley. Tighten the handle.
- 5.2 Loosen the height adjustment handle and rotate the bracket so the Spindle is at the top and to the back. See Figure 8. Tighten the handle.
- 5.3 Rotate the lathe shaft so the flat faces the access hole.
- 5.4 Apply a very thin film of grease on the shaft and slide the motor pulley onto the shaft with the hub on the inside.
- 5.5 Keep the flat aligned with the access hole and rotate the pulley so the set screw will tighten on the flat.
- 5.6 Tighten the set screw with the long 1/8" hex wrench then back it off a just a little so the pulley can slide.
- 5.7 Place the belt over the spindle pulley and the motor pulley. Slide the motor pulley in or out until the belt is aligned. (Use a screw driver through the access hole to pry the motor pulley outward.)
- 5.8 Loosen the lock nut handle and pull the Spindle forward to tighten the belt. Tighten the handle.
- 5.9 Turn the Lathe shaft until the motor pulley completes a full revolution. Check the alignment of the belt. Move the pulley in or out so the belt tracks along the center of the motor pulley.
- 5.10 Tighten the set screw onto the flat with the long 1/8" hex wrench. Again, check that the belt tracks along the center of the motor pulley. If necessary, loosen the set screw and re-align the motor pulley. Finally tighten the set screw securely using a pair of pliers on the hex wrench.
- 5.11 Loosen the height adjustment handle and position the Spindle as illustrated in Figure 9.
- 5.12 Loosen the lock nut handle and let the weight of the Spindle tighten the belt. Do not apply additional pressure. The weight of the Spindle is sufficient to tighten the belt to the proper tension.

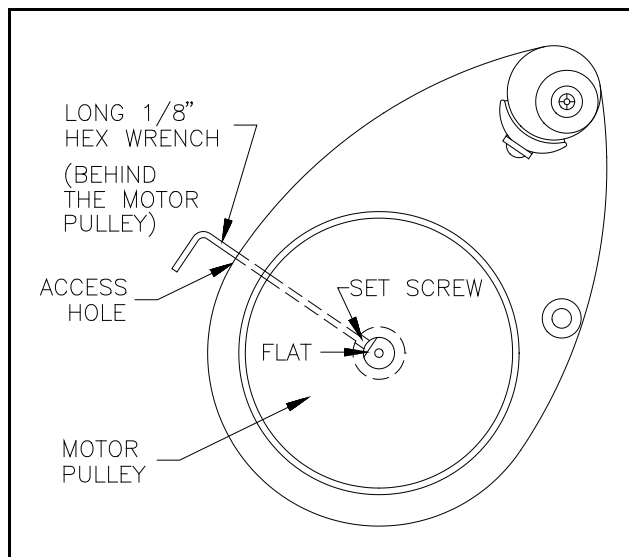


Figure 8. Install the pulley

6.0 INSTALL THE LIGHT SHIELD

- 6.1 Remove the two nuts and one fiber washer from the mounting arm on the Light Shield.
- 6.2 Put the arm through the hole in the bracket. See Figure 9. Install the fiber washer and the two nuts on the end of the arm.
- 6.3 Tighten the first nut with a 1/2" end wrench so the Light Shield is held firmly in place but can still be moved.
- 6.4 Use a second 1/2" wrench to tighten the second nut while holding the first nut from turning.
- 6.5 Loosen the height adjusting handle and position the spindle to the desired height.
- 6.6 Adjust the Light Shield so the safety glass is between the Spindle and your face.
- 6.7 Connectors for hardwiring the Light Shield power cord into the base of the lathe have been included. A 5/8" dia. hole must be drilled in the rear of the lathe base to accommodate the strain relief. If preferred, an electrical plug can be installed at the end of the cord.

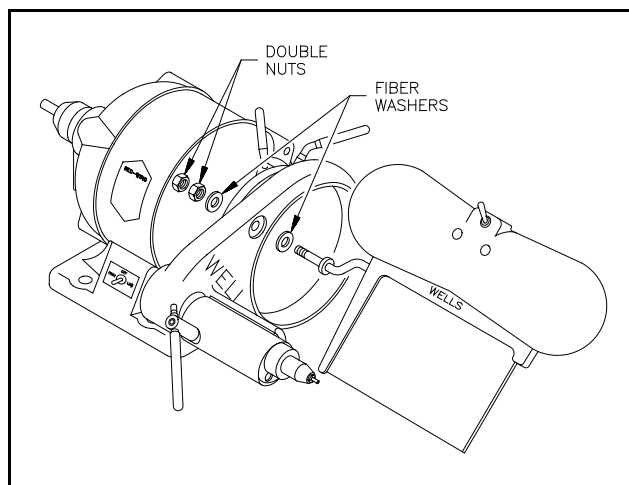


Figure 9. Install the Light Shield

- 6.8 Install two 60 watt **ROUGH SERVICE** light bulbs. Ordinary bulbs will not withstand the vibration.
- 6.9 **CAUTION! The Light Shield becomes very hot while in use. Do not touch!**

7.0 TEST AND ADJUST

- 7.1 Make sure the shipping rod is securely held in the collet and is not protruding more than 1/4".
- 7.2 Switch the lathe toggle switch to the **OFF** position (center).
- 7.3 Connect the lathe power cord to a receptacle with **PROPER GROUNDING and POLARITY**.
- 7.4 **Put safety glasses on.**
- 7.5 Switch the lathe toggle to **SLOW**. After the Lathe is up to speed, switch the toggle to **FAST**. If there is excessive noise or vibration, tighten each of the spindle mounting screws a quarter turn alternately until it stops.
- 7.6 Check that the belt still tracks along the center of the edge of the motor pulley. If the belt is only slightly misaligned, adjust the spindle mounting screws by loosening one and tightening the other a little until the belt is centered and there is no excessive noise. If the belt is hanging off the edge of the motor pulley, disconnect the power cord, loosen the set screw and re-align the motor pulley.

CONGRATULATIONS! You have just completed the installation of the WELLS Gold Chrome Bracket Assembly.

IMPORTANT: READ ALL INSTRUCTIONS IN THE USER'S MANUAL BEFORE OPERATING THE WELLS GOLD CHROME FINISHING MACHINE. FAILURE TO COMPLY WITH THESE INSTRUCTIONS COULD RESULT IN SEVERE PERSONAL INJURY AND/OR PROPERTY DAMAGE.

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