

REPLACING THE POP-OUT SPRING

Product No. Q186
POP-OUT SPRING PKG-2

1.0 OVERVIEW

If the pop-out spring has been damaged or the special collet falls out, the pop-out spring needs to be replaced. Product No. Q186 POP-OUT SPRING PKG-2 may be ordered for replacement. A set of stops, product No. Q188 may be needed to properly adjust the size of the collet.

2.0 REMOVING THE POP-OUT SPRING

- 2.1 Turn off the lathe and disconnect the power cord.
- 2.2 Move the handle to the open collet position (6:00 o'clock) and remove the tool.
- 2.3 Insert the collet wrench into the master collet and turn counterclockwise to unscrew. If the collet turns but will not unscrew, see section 6.0, REMOVING A STUCK COLLET.
- 2.4 Remove the master collet and the special collet. The pop-out spring, stop, and stop lock screw will be attached to the special collet. See Figure 2.

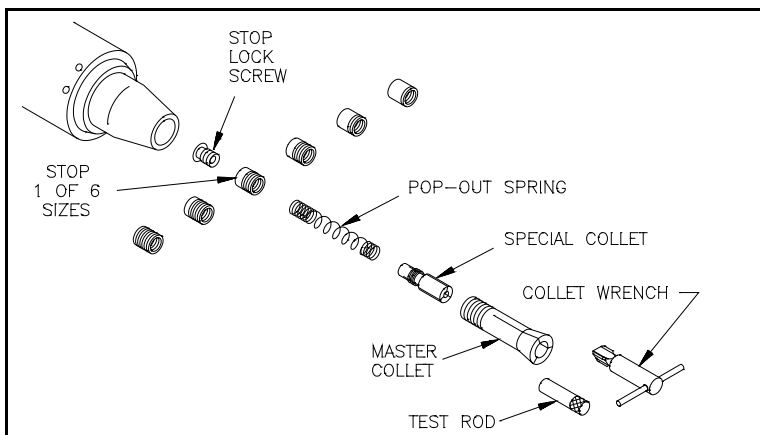


Figure 1.

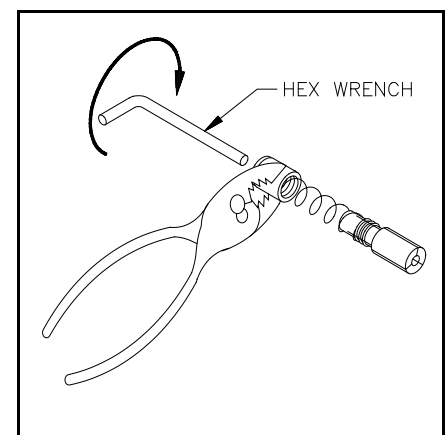


Figure 2.

- 2.5 Remove the stop lock screw by **LIGHTLY** grasping the stop with a pair of pliers. Insert the 3/32 hex wrench into the end of the stop lock screw and unscrew it.
- 2.6 Unscrew the stop to remove it from the pop-out spring. Set the stop aside.
- 2.7 Remove the old pop-out spring from the special collet.

3.0 CLEANING THE COLLETS

- 3.1 Wash the collets in solvent. Solvent may be used on these parts **ONLY** when removed from the collet body. Dry the parts thoroughly.
- 3.2 Clean the inside of the collet body so the master collet will seat against the stop properly. Clean the threads using the tube brush provided in the accessory kit. Rotate the brush into the threads a few times. Use a pipe cleaner or Q-tip to clean out all the debris in the bottom of the hole. Do not use solvent here.

4.0 INSTALLING THE POP-OUT SPRING

- 4.1 Examine each end of the new pop-out spring carefully. One end has about five closely spaced coils while the other has about six. The end with five coils also has a tiny hook at the end of the wire. See Figure 3. When properly installed, this hook locks the spring onto the collet.
- 4.2 Hold the five closely spaced coils (with the hook) and start threading the coil onto the special collet. When the hook reaches a slot it will tend to get caught. Squeeze the coils just behind the hook. See Figure 3. Ease the hook past each slot.

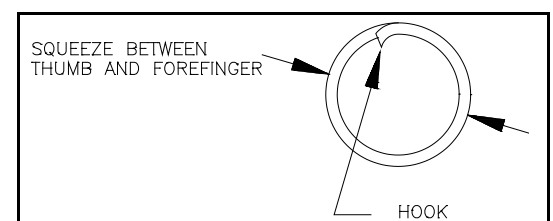


Figure 3.

- 4.3 Continue threading the hook onto the collet until it lodges into the center of the widened area of one of the slots. See Figure 4.

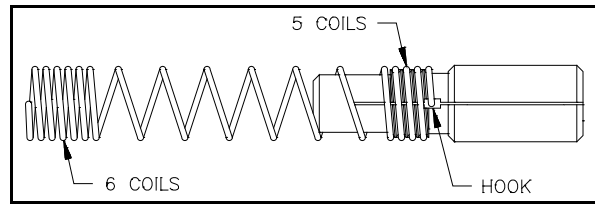


Figure 4.

5.0 INSTALLING AND ADJUSTING THE COLLETS

- 5.1 Screw the stop you set aside onto the pop-out spring.
- 5.2 Screw the stop lock screw into the stop. **LIGHTLY** grasp the stop with the pliers. Tighten the stop lock screw with the 3/32 hex wrench.
- 5.3 Put a **THIN** film of grease or Vaseline on the outside of both collets including the threads of the master collet.
- 5.4 Insert the collets and tighten with the collet wrench.
- 5.5 Make sure that the handle is in the open collet position (6:00 o'clock). Insert the test rod that comes with the set of stops (or a 1/4" tool shank) into the master collet. The test rod should just slip into the collet. If it is loose, install the next size shorter stop. If the test rod will not fit into the master collet or is too tight, install the next size longer stop. Install the shortest stop that will allow the test rod to just slip into the master collet.
- 5.6 The special collet should protrude about 1/8". If not, remove the collets and carefully stretch or compress the pop-out spring as needed.
- 5.7 Insert a tool into the collet and move the handle to the operating position.
- 5.8 Connect the power cord and test the operation of the Quick Chuck.

The installation of the pop-out spring is now complete. If you have any questions or difficulties, please call Wells Dental, Inc. at 1 800 233-0521.

6.0 REMOVING A STUCK COLLET

If the Quick Chuck is run without a tool in the collet or the collet is not cleaned and lubricated periodically it may get stuck in the Quick Chuck shaft. The collet may turn but not unscrew.

- 6.1 Turn off the lathe and disconnect the power cord.
- 6.2 Move the handle to the open collet position (6:00 o'clock). Remove the tool.
- 6.3 Insert the collet wrench. Tap the end of the collet wrench **LIGHTLY** while turning the collet wrench counterclockwise. See Figure 5. If this does not release the collet, continue with the next step.
- 6.4 Check that the handle is in the open collet position. Remove the four installation screws and remove the Quick Chuck.
- 6.5 Hold the steel clutch plate to keep it from turning while you remove the collet. See Figure 6.
- 6.6 Install the Quick Chuck on the lathe using the four installation screws.

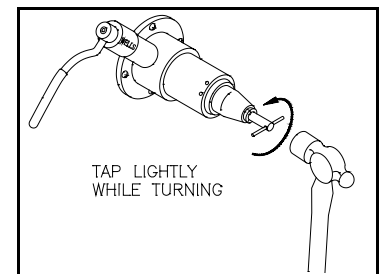


Figure 5.

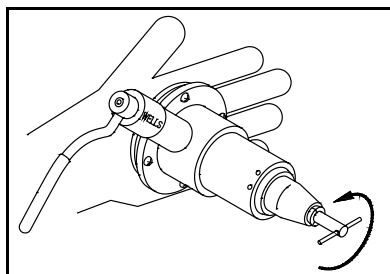


Figure 6.