

## FOREDOM® Duplex Spring Connection

### 9. Lubrication:

- Apply a light film of Foredom Grease to the new duplex spring.
- Apply one drop of Foredom Oil to the axle.

**10.** Reassemble by reversing procedures in steps 2 through 5 on opposite page.

**11.** Attach handpiece to flexible shaft and sheath being sure to align shaft tip with slot in handpiece shaft connector. Run handpiece at low speed for one or two minutes to spread out grease and oil.

Part No.	Description
HP76	Duplex Inner Spring
HP75	Duplex Axle
HP73 (H.8D, H.9D, H.15D, H.18D, H.52D, H.55D, H.56D)	Duplex Cover Assembly
HP73-1 (H.7AD), or	
HP74 (H.7D, H.10D, H.20D)	
HP47	Washer
HP10531	Retaining Ring
HP46	Slotted Shaft Connector
HP42	Q.D. Connector
MS10005	Foredom Motor & Handpiece Oil in hypodermic dispenser
MS10010	Foredom Motor & Handpiece Oil in 2 oz. container
MS10006	Foredom Flexible Shaft Grease in 1 oz. container

**Caution:** To avoid frequent breakage or kinking of springs, Do Not subject this connection to unnecessarily sharp bends of more than a 45° angle. Do Not exert excessive pressure on work, but let the speed of the tool accomplish the desired result.

Avoid jamming of bur, stone, drill, or other cutting tool in a cavity, slot, groove, or hole in workpiece.

**The duplex spring is a replacement part that is not covered by the handpiece warranty.**

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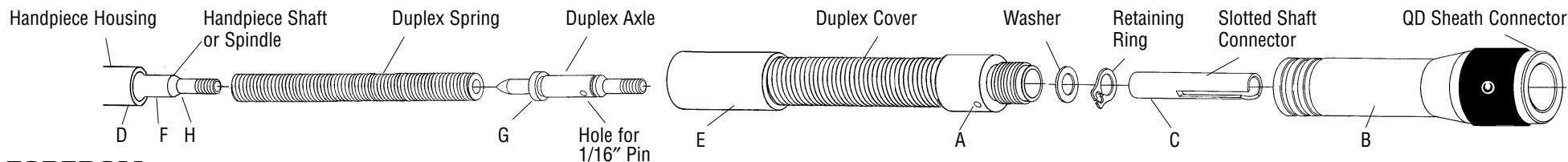


## FOREDOM® Duplex Spring Connection

Duplex Springs provide extra flexibility to a handpiece when more precise control for delicate work is required. The spring drive is made of special steel, double wound, tubular construction with a protective flexible spring cover.

**Duplex Springs are subject to breakage and are not covered by warranty.** We recommend that only experienced users of flex shaft tools and/or those whose work demands added flexibility consider this style handpiece.

The duplex spring component requires periodic lubrication.



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### Directions for Replacing Duplex Springs:

You will need: 2 pair of pliers, 1/16" diameter pin, and a 3/16" open end wrench or needle nose pliers.

1. Remove handpiece from sheath. This can be done with a sharp pull.
2. Unscrew the QD Sheath Connector from Duplex Cover Assembly using two pairs of pliers at points A and B, turning counterclockwise. This exposes the Slotted Shaft Connector.
3. Insert a 1/16" pin through the hole in the Duplex Axle. Holding pin, unscrew Slotted Shaft connector from axle, using a pair of pliers at point C turning counterclockwise.

**4.** Remove Retaining Ring from axle with needle nose pliers. Remove Washer.

**5.** Unscrew Duplex Cover from handpiece using two pairs of pliers at points E and D, turning counterclockwise. This exposes the damaged Duplex Spring.

**6. To remove the damaged spring:** Inspect Handpiece Shaft at point F (or point D for the H.18D handpiece only). Depending on your handpiece model:

**Follow this if you have a crosshole** (Handpieces H.7D, H.15D, H.9D, and H.18D): Insert a 1/16" pin through crosshole in spindle to hold it. Take a pair of pliers to hold damaged spring, and pull while turning counterclockwise to remove it.

**Follow this if you have wrench flats** (Handpiece H.10D): Using a 4.5mm(3/16") open end wrench to hold spindle, take a pair of pliers to hold damaged spring, and pull while turning counterclockwise to remove it.

**Follow this if you do not have a crosshole or wrench flat** (Handpiece H.7AD, H.8D, H.52D, H.55D, and H.56D): Hold spindle on point F using a narrow pair of pliers above spring. With a second pair of pliers hold damaged spring, and pull while turning counterclockwise to remove it.

**7. To remove axle from damaged spring:** Insert a 1/16" pin through crosshole in axle. Remove spring as in Step 6 using a pair of pliers.

### 8. To install new spring:

Put the new spring on the duplex axle first by pushing and turning it with the pliers counterclockwise. **Be sure that the spring goes all the way to the shoulder of the axle (Point G).** Holding the spindle as described in Step 6, (depending on your model), install the spring on the spindle by pushing and turning it with the pliers counterclockwise. **Be sure that the spring goes all the way to the shoulder of the spindle (Point H).**

### IMPORTANT

**Be sure to follow lubrication instructions on reverse side.**