# W&H Adec Repair Procedures (TA-96L / TA-96LW / TA-98L / TA-98LW)



Tools needed to properly repair this handpiece:

- 1. Adec Coupler
- 2. Adec Back Cap Removal Tool (70124)
- 3. Auto-Chuck Protector Punch (00024A)
- 4. Round Tip Punch (00024R)
- 5. Large pair of Dikes (Wire Cutters)

The W&H Adec models are relatively new handpieces. These came out in 2002 and you should now start seeing them out of Manufacturers warranty. Lube is required on this handpiece.

### STEP 1

Try to determine the problem before opening the handpiece. Insert a high speed bur, checking that it inserts smoothly and tightens securely. Twist the bur manually to feel how smoothly it turns. Attach it to your Adec coupler and run the handpiece (if you can). Check that air pressure is at 45 p.s.i.. Listen for the appropriate pitch at full speed and for a smooth rundown. Check the water spray – it should be a fine mist. Attempt to cut a shell to test the torque. Disassemble the handpiece following the instructions below.

# Disassembly





### STEP 2

Using the Adec back cap tool (70124), twist in a counterclockwise direction to unscrew the back cap and remove the turbine assembly.

**TIP:** Sometimes the cap is very tight. Be very careful not to let the tool slip and strip or scratch the back cap.

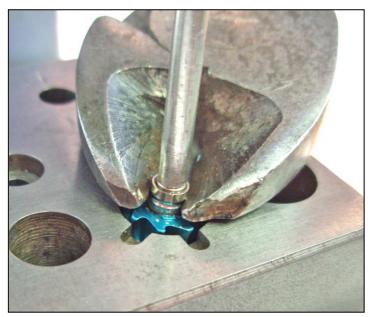


1	70123	Synea Large Back Cap (TA98L / TA98LW)	
	70125	Synea Small Back Cap (TA96L / TA96LW)	
2	70115	W&H Adec O-ring	
3	70109	W&H Adec Loading Spring	
4		OEM Turbine	
5	70110	W&H Adec Teflon Washer	



### STEP 3

Hold the turbine bearing firmly in your small channel lock pliers. Be careful not to touch the impeller. Now apply pressure to the outer bearing race until it cracks. Then, perform the same procedure to the other bearing.



#### STEP 4

Hold the inner race of the bearing, in the ball groove, with your cutters. Now, place the unit into a hole on your work block and lower the Auto-Chuck Protector Punch over the push button on the spindle. Next, lower the press against the punch and carefully press the spindle out of the bearing you are securely holding with the cutters.

Once completed, perform the same task on the other bearing race so you are left with the naked spindle/impeller combo.

# Assembly



1	70123	Synea Large Back Cap (TA98L / TA98LW)
	70125	Synea Small Back Cap (TA96L / TA96LW)
2	70109	W&H Adec Loading Spring
3	70115	W&H Adec O-Ring
4	60102 or M	W&H Adec Bearing
5	70116LSYNEA	W&H Adec Large Spindle Combo (TA98L or LW)
	70116SSYNEA	W&H Adec Small Spindle Combo (TA96L or LW)
		Note: you can sub in a -B, or -SV spindle combo as well.
6	70110	W&H Adec Teflon Washer



## STEP 1

Place a 60102 Adec Bearing into Hole #2 of your work block (metal shield facing down into block). Next, insert the open end of your spindle into the bearing and, using your Auto-Chuck Protector Punch, press the spindle into the bearing until the impeller touches the bearing race.



### STEP 2

Place a 60102 Adec Bearing into Hole #2 of your work block (metal shield facing down into block). Next, insert the push button end of your spindle into the bearing and, using your 00024R (Round Punch), press the spindle into the bearing until the impeller touches the bearing race.



### STEP 3

As shown, insert the loading spring and Teflon washer into the head of the handpiece. Remember, the loading spring goes in first, followed by the Teflon washer.



The Teflon washer has a raised outer edge on one side. Be sure that the raised edge faces up, as it needs to make contact with the outer edge of the front turbine bearing.

Next, insert the 70109 Loading Spring into the back cap. Then, insert the two o-rings into the head and back cap respectively.



### **STEP 4**

Place the rear bearing of the turbine into the back cap. Once secure, slowly feed the turbine assembly into the head of the handpiece and tighten using your W&H Adec back cap wrench (70124)

### STEP 5

Lubricate the handpiece with your Euro-Lube. Insert a bur into the chuck and run at the W&H Adec factory recommended 45 P.S.I. Check for cutting power, a smooth run up and a smooth 3 second run down. Lastly, check the water spray and be sure there are no leaks at the coupler end.