

KaVo GENTLEsilence LUX 6500B – PB (Pushbutton) Repair Procedure



Tools needed to properly repair this handpiece:

1. Kavo Coupler
2. Kavo Back Cap Removal Tool (10129)
3. Auto-Chuck Protector Punch (00024A)
4. Round Tip Punch (00024R)

The KaVo 6500B is a relatively new handpiece. It came out in 2005 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 KaVo coupler and run the handpiece (if you can). Check that air pressure is at 40-45 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 Kavo PB back cap removal tool (10129), 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.



STEP 3

Place the turbine in your workblock. As pictured, be sure to insert the rear bearing of the assembly into the hole just above and to the right of Hole #2. This hole allows the bearing to fit in nicely while providing

good support for the impeller. Don't worry about the fragile impeller, on the OEM KaVo 6500 turbine, we must replace it any way.



STEP 4

Next, we must carefully press the Good OEM Spindle out of the bearings. **DO NOT ATTEMPT to BREAK the BEARINGS.** We are using a different technique on the KaVo 6500. With the 00024R Round punch perfectly aligned over the spindle, carefully press the spindle down out of the top bearing and impeller.



STEP 5

You will now be left with the items pictured (from left); The Flanged Spindle, The bearing/impeller set, and the front thrust washer. You will re-use the Spindle and Washer but the bearing/impeller set is junk.



Picture Number	Part Number	Description
1	10106 10106S	O-Ring O-Ring (Sable brand)
2	10216	KaVo 6000/6500 Spring Washer Kit
3	40405CM	Myonic Straight Bearing
4		OEM KaVo 6500 Flanged Spindle
5	10116TI	After-Market KaVo 6500B Impeller
6	10101ANG	KaVo Bearing
7	10116TS	KaVo 6500B Front Slinger Washer

Assembly for OEM Spindle Only



STEP 1

Now the re-assembly process will begin. First, place a 40405CM bearing, with the shield side UP, into Hole #2 on your work block. Next, using your Auto-Chuck Protector Punch (00024A), carefully press the spindle down into the bearing until the flange on the end of the spindle touches the bearing.

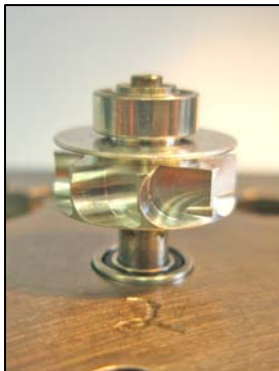


You should now line up your new assembly as pictured at left. Spindle with bearing, Impeller, Front Bearing and Slinger Washer



STEP 2

Place the 10116TI Impeller, with the beveled side Down, over Hole #1 on your work block. Then insert the open end of your Spindle into the center hole on the impeller. Using your Auto-Chuck Protector Punch (00024A), carefully and slowly press the Spindle into the Impeller until the Bearing touches the Impeller.



STEP 3

Place your 10101ANG Bearing, shield side Down, into Hole #2 on your workblock. Next, insert your Spindle/Bearing/Impeller assembly into the bearing. Using your Auto-Chuck Protector Punch (00024A), carefully press the Spindle into the bearing.



STEP 4

With the main turbine assembly now assembled, place the 10116TS front thrust washer onto the front end of the spindle. Next, place the front end of the assembly into Hole #2 in your work block. This will center the turbine and should allow you to slowly and carefully press the turbine assembly into the thrust washer.



STEP 5

Your completed turbine assembly should look like the picture at left. First, install the new o-rings into the head and back cap. When inserting the turbine into the handpiece, please remember, the Small 10216 Wavy-Washer goes down in the head of the 6500B while the Larger 10216 Wavy-Washer goes in the Back Cap.

Assembly for After-Market Spindle Only



Picture Number	Part Number	Description
1	10106 10106S	O-Ring O-Ring (Sable brand)
2	10216	KaVo 6000/6500 Spring Washer Kit
3	40405CM	Myonic Straight Bearing
4	10116T-A 10116T-S	After-Market KaVo 6500 Spindle/Impeller Combo Sable KaVo 6500B Balanced Spindle/Chuck Combo
5	10101ANG	KaVo Bearing
6	10116TS	KaVo 6500B Front Thrust Washer

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STEP 1

Place your 10101ANG KaVo bearing, Shield Side DOWN, into Hole #2 on your work block. Then, place the open end of your 10116T KaVo 6500B Spindle into the Bearing. Using your Auto-Chuck Protector Punch, carefully press the spindle into the bearing until the impeller and bearing make contact.



STEP 2

Now, place the 40405CM bearing, Shield Side DOWN, into Hole #2 on your work block. Then, place the button end of the spindle in the bearing. Using your Auto-Chuck Protector Punch, carefully press the spindle into the bearing until the impeller and bearing make contact.



STEP 3

Now, place the 10116TI Thrust Washer onto the open end of the spindle. Next, place the assembly down into Hole #2 in your work block to properly align the turbine over the washer. Lastly, carefully press the turbine into the Thrust Washer until the Bearing and Washer touch.



STEP 4

Your completed turbine assembly should look like the picture at left. First, install the new o-rings into the head and back cap. When inserting the turbine into the handpiece, please remember, the Small 10216 Wavy-Washer goes down in the head of the 6500B while the Larger 10216 Wavy-Washer goes in the Back Cap.

