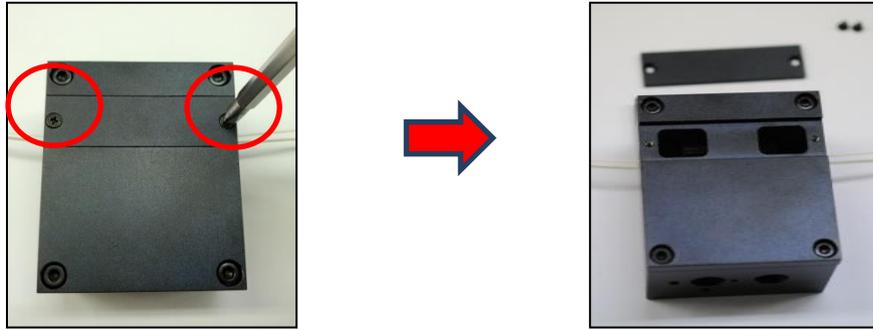


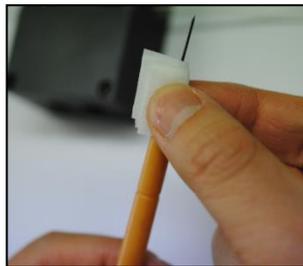
Tunable Directional Coupler Index Matching Oil Supplement

1. Disassemble Upper Cover



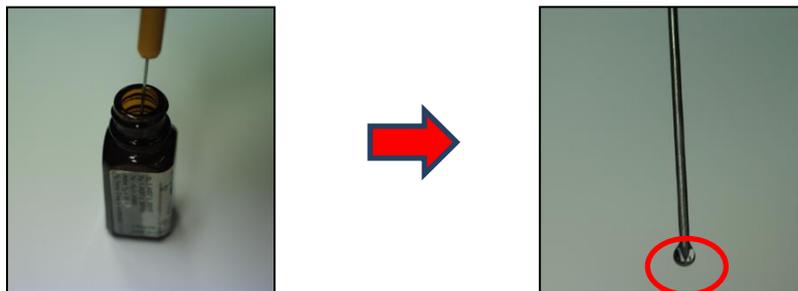
- Use M2 screwdriver and disassemble the cover

2. Pin Cleansing



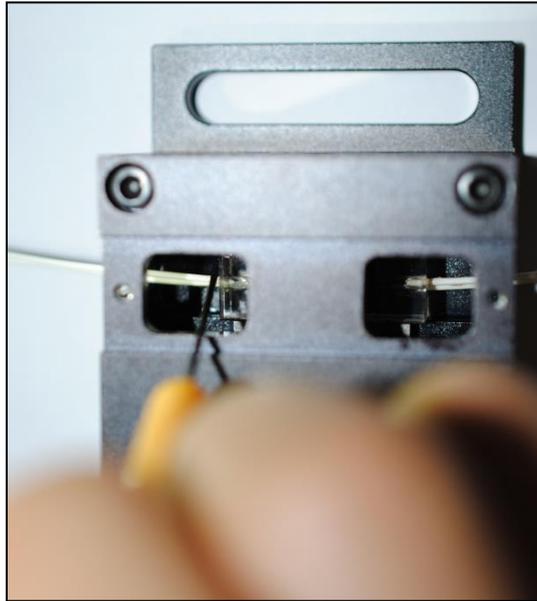
- Prepare 1mm diameter sized pin and cleanse the pin

3. Use Index Matching Oil



- Coat one drop of index matching oil to the cleansed pin

4. Inject Index Matching Oil



- Touch the end of the pin to the chip block gap and you can see oil permeates into the two chip block gap. (It is the same as at the right side.)
- #### 5. Assemble Upper Cover
- Do assembling in the reverse order of disassembling (After oil supplement, try to do the assembling right away)
- #### 6. Stabilizing
- Once oil supplement is done, coupling ratio can be destabilized at the first time. So let the oil permeate for more than 30 min. and try to turn the knob. If the oil permeates fully, the coupling ratio will be normal. (If oil is injected when the chip block is fully dried, it will take about 24 hours to check the normal coupling ratio.)
- #### 7. Index Matching Oil injection period
- In case of using the product at the average 25 degree temperature environment, oil supplement should be done every 6 month. In case the product is not used for a long time or it is used at the low or high temperature environment, the oil can be dried faster, so in this case the oil supplement should be done when the coupling ratio is destabilized.