



METAFORM Pico Hybrid Hotend User Manual

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METAFORM Pico Hybrid Hotend



Product Information

The user manual provides instructions on part list and assembly of the product, including nozzle changing, direct drive setup, Bowden setup, additional parts, fan, and tools. The product also includes a Pico Hybrid Assembly, a new nozzle, and an optional PTFE liner. The package also includes 7mm and 11mm flat wrenches as optional tools. The illustrations may show variations in sizing to enhance relevant details. The wiring length shown in the illustrations is not reflective of the actual wire length and is shortened for simplicity. The manual also includes a warning to avoid damaging the heatsink of the hotend while removing nozzles with wrenches and to ensure correct polarity while wiring.

Product Usage Instructions

1. Remove the silicone sock from the heat block.
2. Retract filament from the hotend. After letting the hot end cool off, unthread the nozzle using your fingers.
3. If the nozzle is too tight to remove by hand, use the provided 7mm and 11mm flat wrenches for leverage. Hold the wrench flats on the bottom end of the heater block with the 11mm flat wrench and use the 7mm flat wrench to loosen the nozzle. Be careful not to apply any twisting force to the heater block. Carefully loosen the nozzle until able to remove with your fingers.
4. If you need to replace the PTFE liner in a nozzle, remove the old PTFE liner from the nozzle by twisting it out to

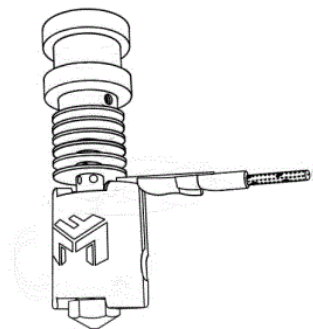
- break any hardened filament. Insert the new PTFE liner into the nozzle, making sure the chamfered end of the liner is inserted down into the nozzle. Improper installation may result in leaks.
5. Reinstall the nozzle using your hand. Do not use the flat wrenches when installing the new nozzle.
 6. Put the silicone sock back on the heat block.
 7. Ensure the correct polarity by matching the coloring of wires between each plug while wiring.

Including

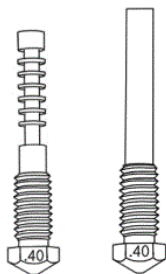
Nozzle Changing

- Direct Drive Setup
- Bowden Setup
- Additional Part Fan

WHAT YOU’LL NEED



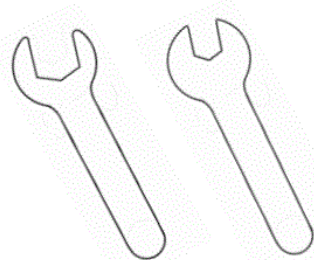
Pico Hybrid Assembly



New Nozzle



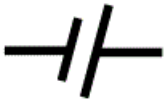
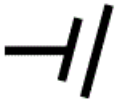

**PTFE Liner
(Optional)**



**7mm and 11mm Flat Wrenches
(Optional)**

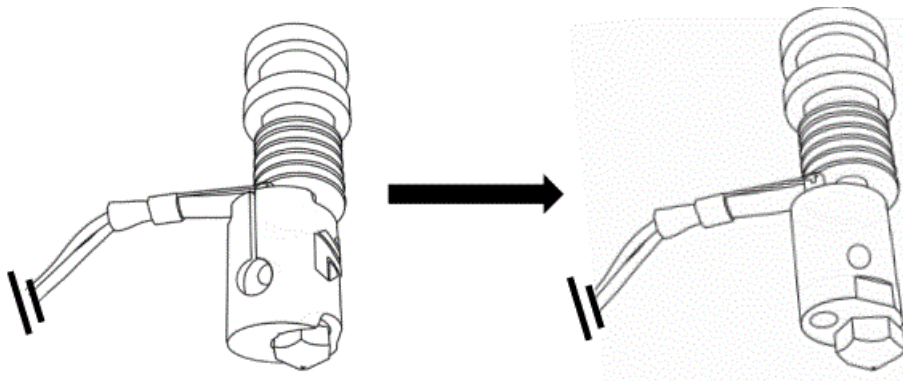
IMPORTANT NOTES

- Sizing of parts may vary across illustrations to enhance relevant details.
- Wiring length is not reflective of the actual wire length and is shortened for simplicity.
- Previous assembly steps may not be visible for each stage of setup.

Wire Length Shortened	Wire Length Cutoff	Connected Terminals
		

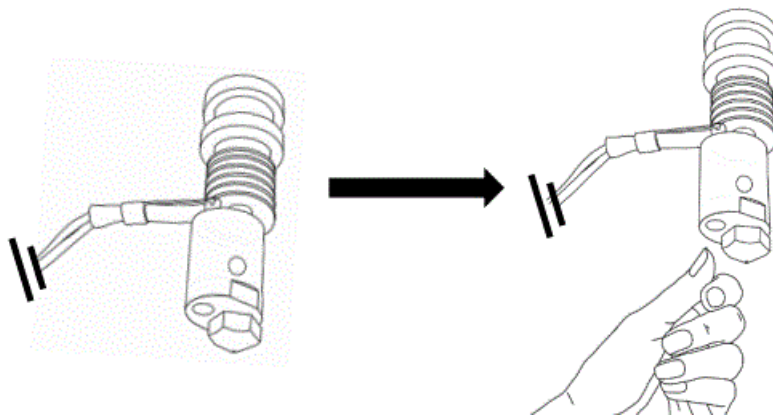
INSTALLATION INSTRUCTIONS

Step 1



- Remove the silicone sock from the heat block.

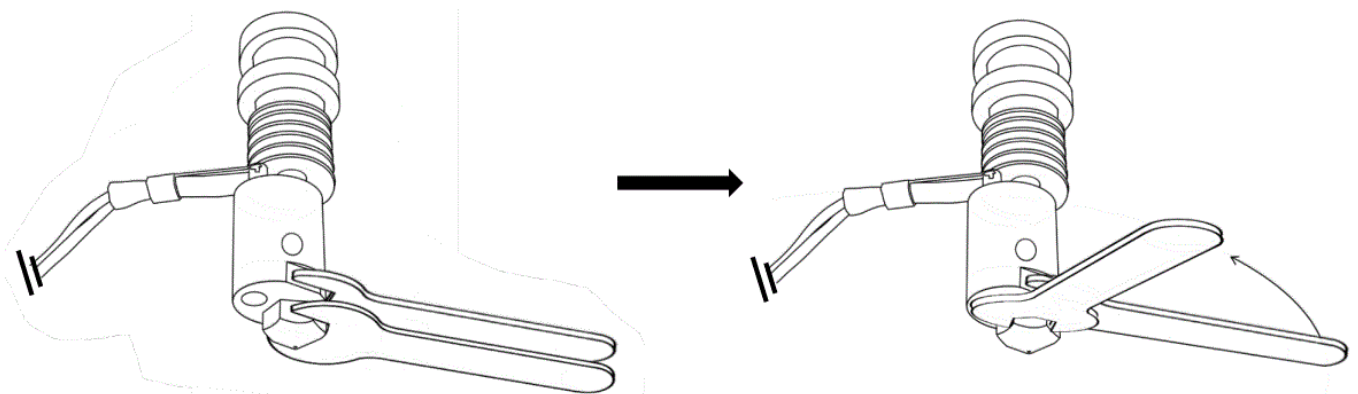
Step 2



- Retract filament from the hotend. After letting the hotend cool off, unthread the nozzle using your fingers.

If nozzle is too tight to remove by hand, proceed to step 3, otherwise skip step 3.

Step 3: OPTIONAL

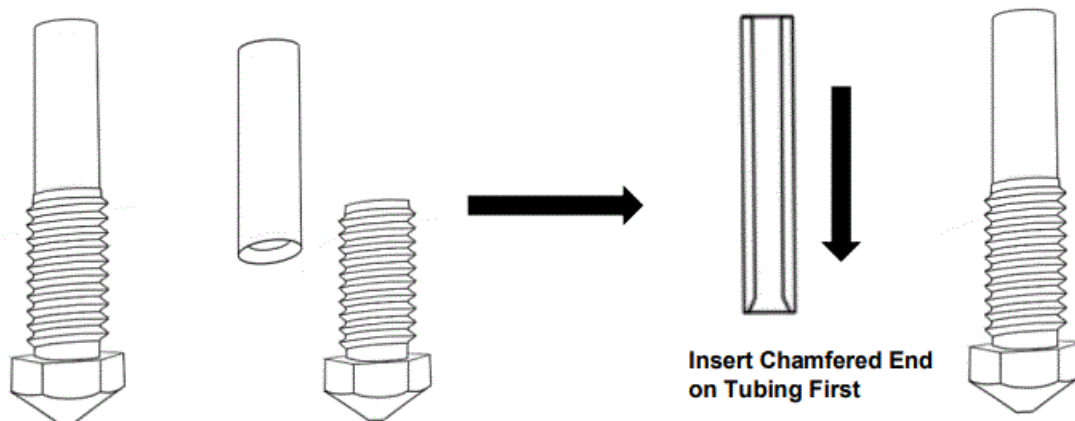


- If Nozzle is too tight, use the provided 7mm and 11mm flat wrenches for leverage. With the 11mm flat wrench, hold the wrench flats on the bottom end of the heater block.
- Use the 7mm flat wrench to loosen the nozzle, being careful not to apply any twisting force to the heater block. Carefully loosen the nozzle until able to remove with your fingers.

WARNING: Applying twisting forces to the heater block may damage the heatsink of the hotend. Be sure to hold the heater block firmly when removing nozzles with wrenches to avoid damaging the heatsink. Do not try to remove cold nozzles with filament still in the hotend.

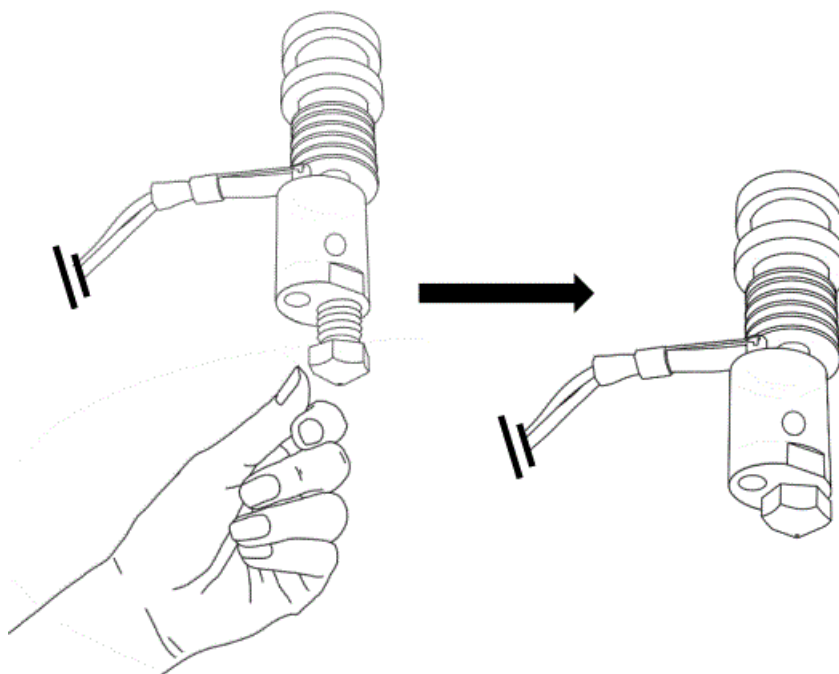
If you need to replace the PTFE liner in a nozzle, proceed to step 4, otherwise skip to step 5.

Step 4: OPTIONAL



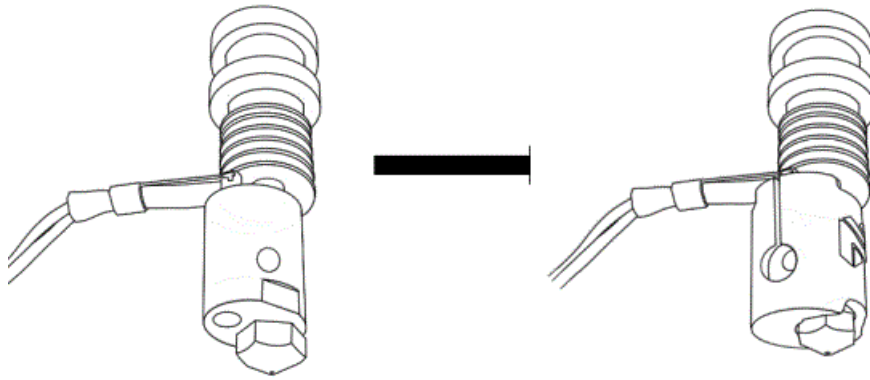
- Remove old PTFE liner from the nozzle by twisting it out to break any hardened filament.
- Insert new PTFE liner into the nozzle, making sure the chamfered end of the liner is inserted down into the nozzle. Improper installation may result in leaks.

Step 5



- Reinstall the nozzle using your hand.
- Do not use the flat wrenches when installing the new nozzle.


Step 6



- Put the silicone sock back on the heat block.

WARNING: Wiring reverse polarity can damage Voltage Regulator. Ensure the correct polarity by matching the coloring of wires between each plug.

Documents / Resources

	<p>METAFORM Pico Hybrid Hotend [pdf] User Manual Pico Hybrid Hotend, Pico, Hybrid Hotend, Hotend</p>
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