



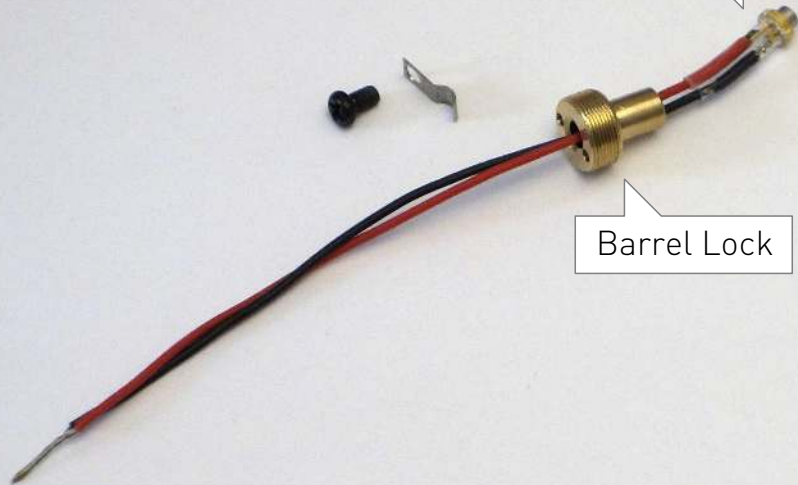
The laser diode housing consists of several parts. Its purpose is to keep the laser diode cool during operation. This extends the lifetime of the diode. Additionally it has a M9x0.5 thread for focus lenses. Be careful during assembly. Laser diodes are sensitive to electro-static discharges. Additionally avoid touching or scratching the lens' surface.



Laser diode

Brass Barrel

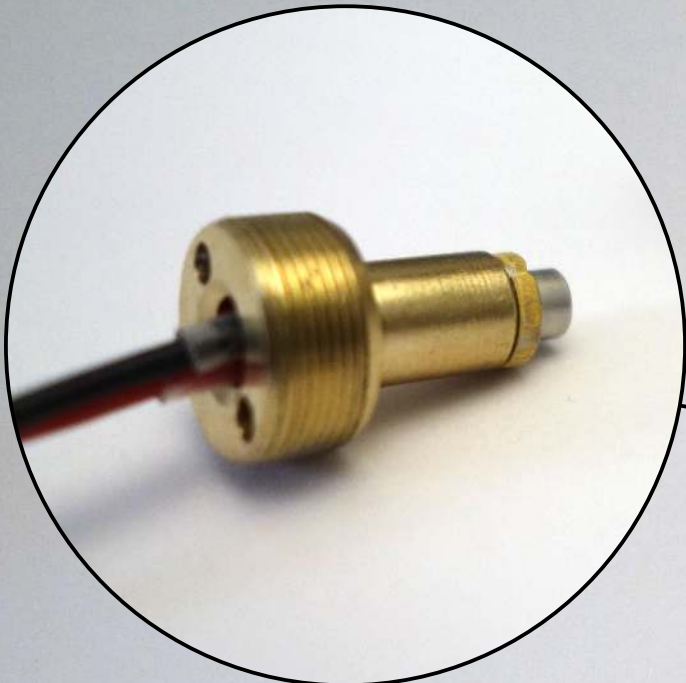
Barrel Lock



Step 1:
Put the cable of the laser diode through the barrel lock in the direction shown on the picture.
Ensure that the laser diode's pins are isolated properly as they may contact



Mr Beam*



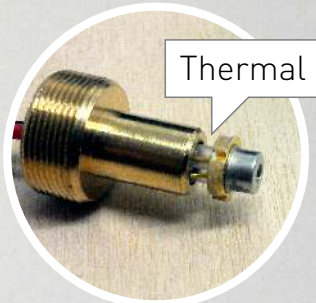
Laser diode



Brass Barrel



Barrel Lock



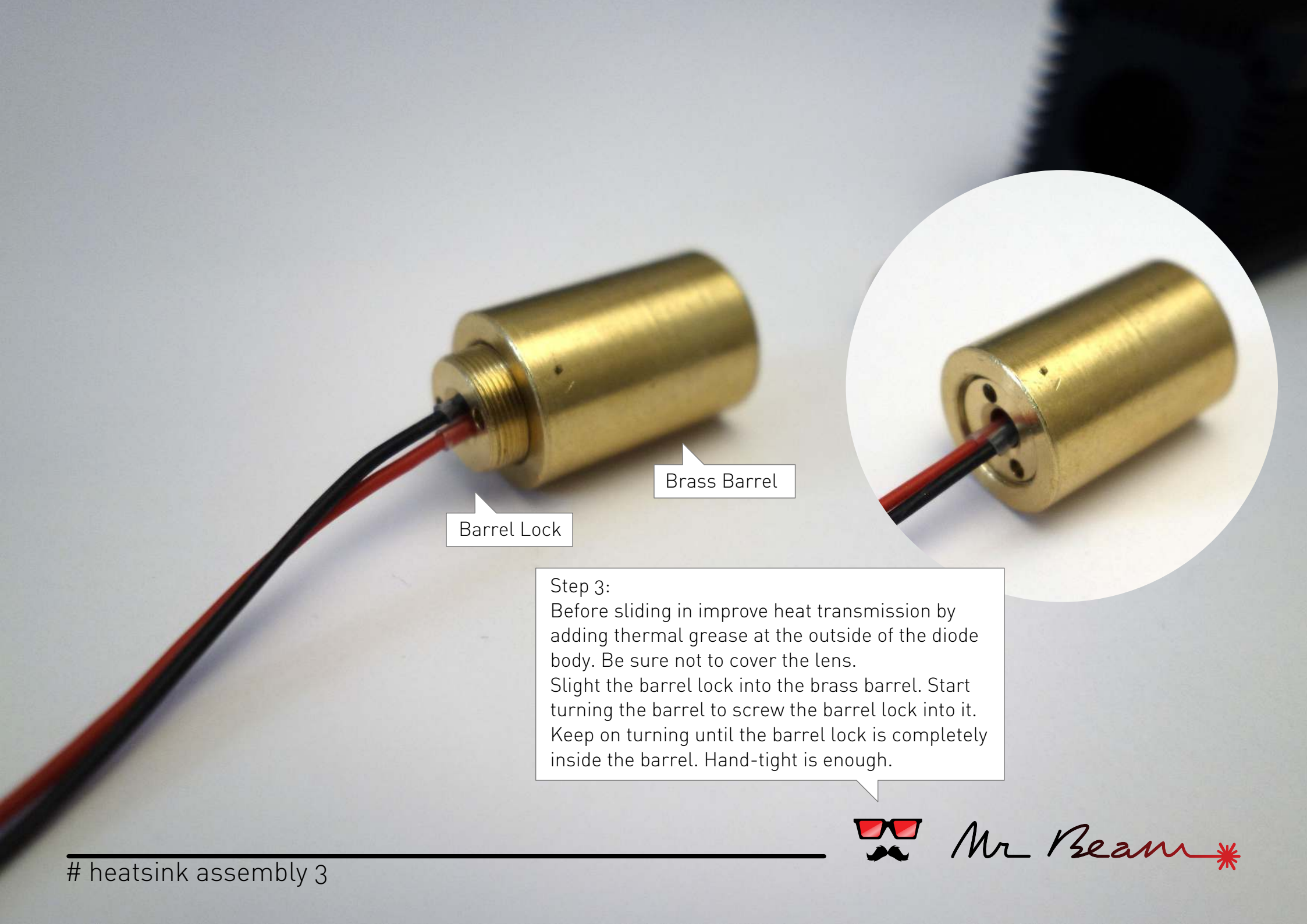
Thermal Grease



Thermal Grease

Step 2:
Push the barrel lock carefully to the diode's body until both have contact. The diode's pins are now fully inside the barrel lock.
Add some thermal grease between the diodes body and the barrel lock. Good heat transmission is mandatory for a long diode lifetime.



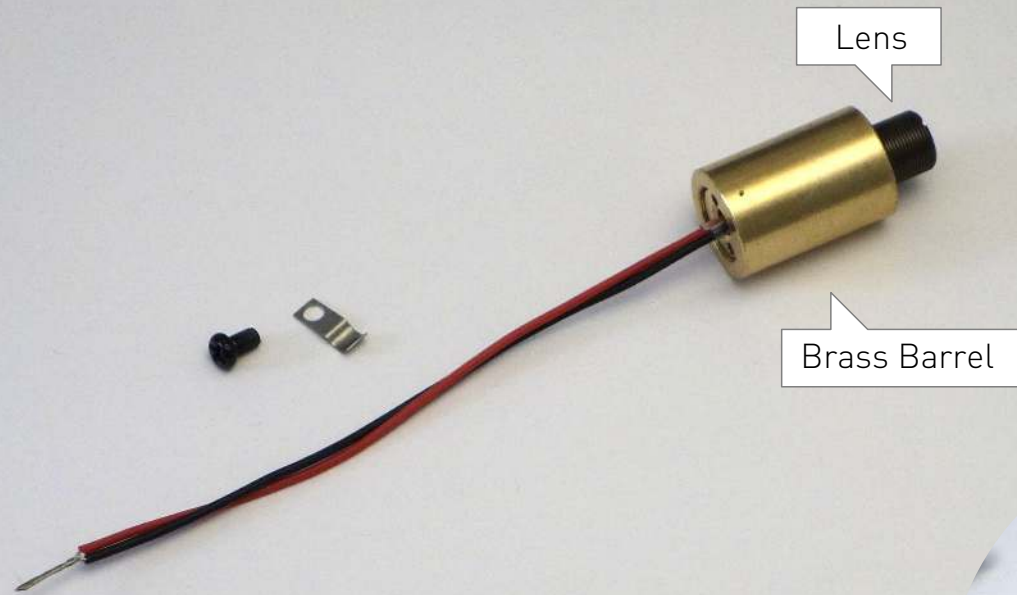


Barrel Lock

Brass Barrel

Step 3:
Before sliding in improve heat transmission by adding thermal grease at the outside of the diode body. Be sure not to cover the lens.
Slight the barrel lock into the brass barrel. Start turning the barrel to screw the barrel lock into it. Keep on turning until the barrel lock is completely inside the barrel. Hand-tight is enough.

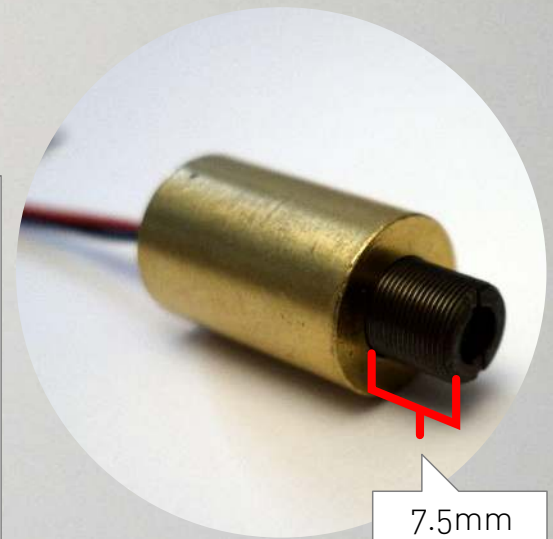




Lens

Brass Barrel

Step 4:
Turn in the focus lens from the other side. Depending on the desired focus point you may screw in the lens more or less. For the Mr Beam Kits 7.5mm outside length is a good starting point.
If the lens feels loose while turning, wrap a little strip of teflon sealing strip around the thread.



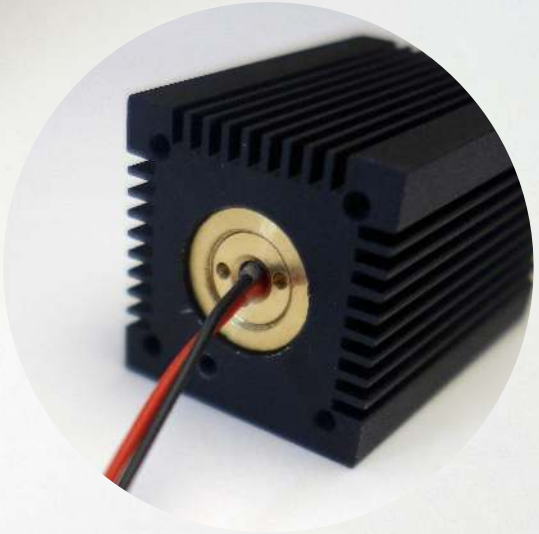
7.5mm

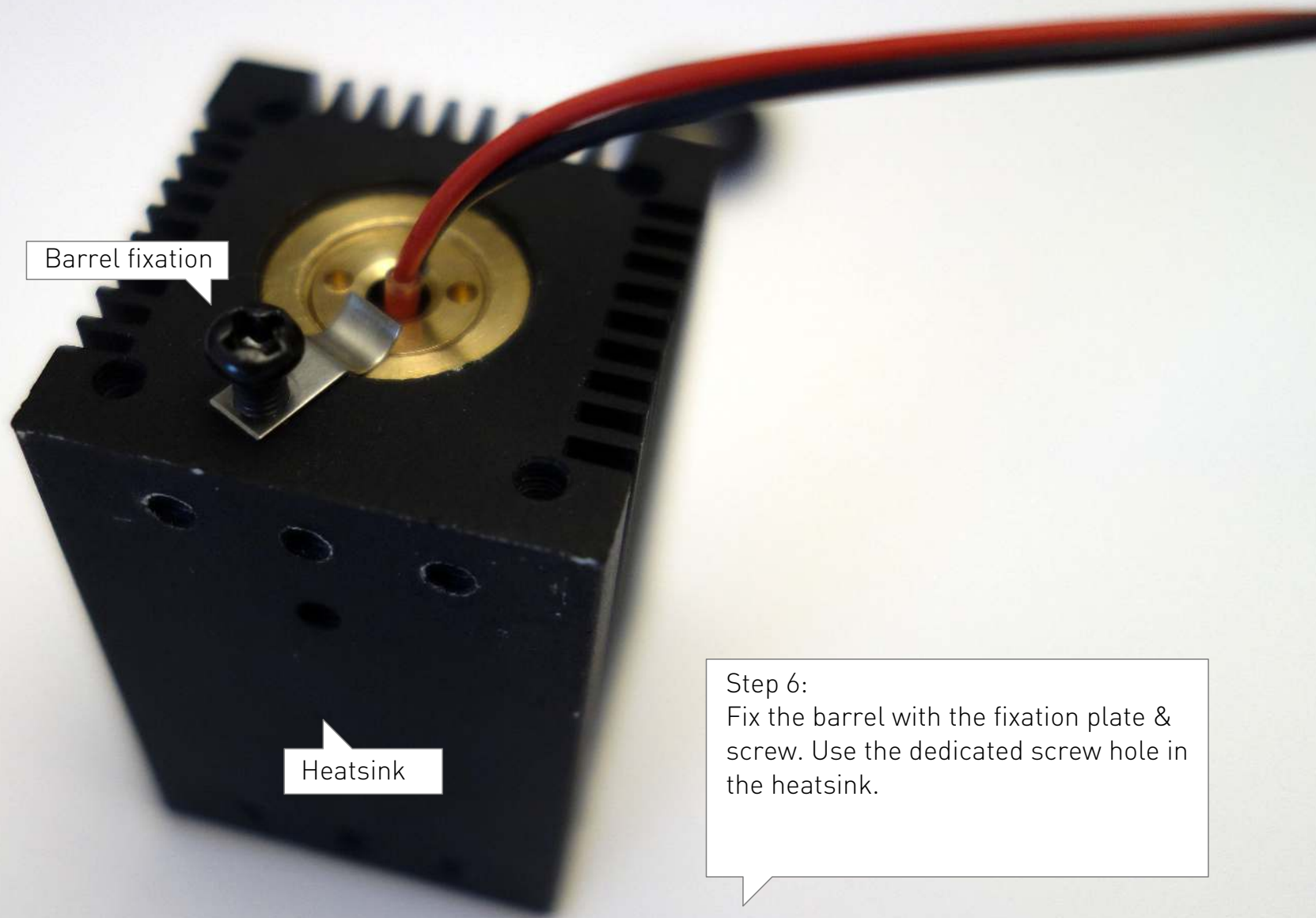


Brass Barrel

Heatsink

Step 5:
Slide the brass barrel into the heatsink
until it is fully inside.

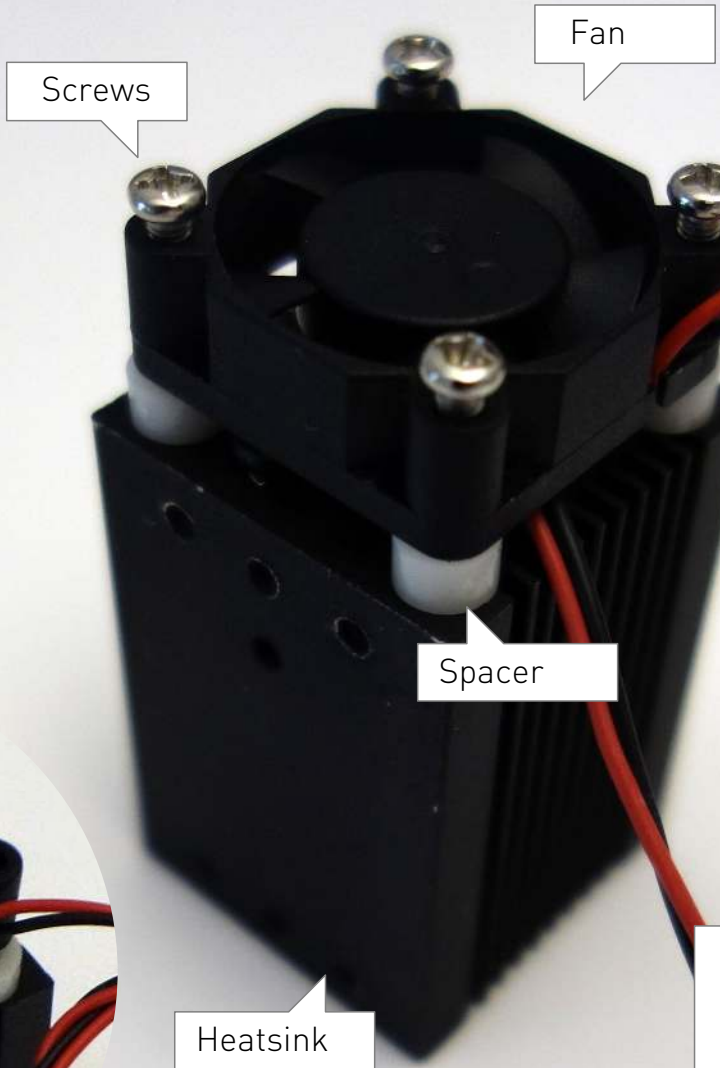
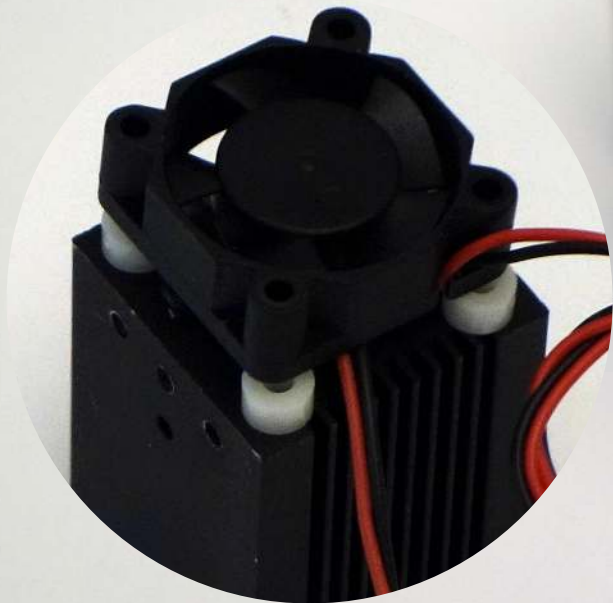
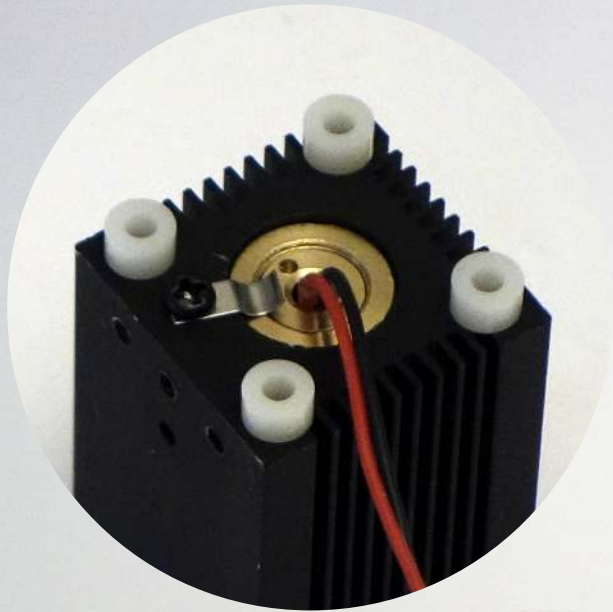




Barrel fixation

Heatsink

Step 6:
Fix the barrel with the fixation plate & screw. Use the dedicated screw hole in the heatsink.



Step 7:
Place the 4 spacers on the screw holes. Put the fan on top of them and attach it with the 4 screws. Take care not to squeeze the laser diode's cable while tightening.