



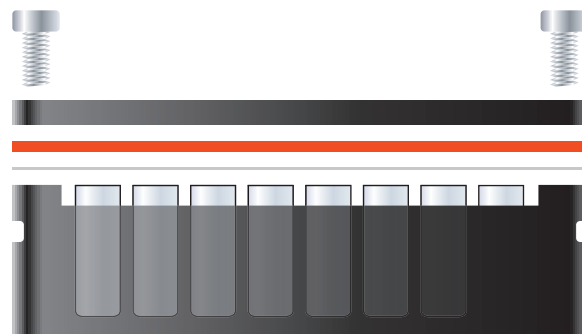
Set-up Instructions



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Photoredox/Parallel Synthesis Gen II Reactor Block Set-up For 24, 48 and 96 well blocks



Sealing the Plate - Rubber Mats & Film

• Sealing the plate properly is critical to reaction success and is an evolving process

– Sealing mats:

- **Silicone rubber mat** - plates use one 1/8" thick orange silicone rubber mat on top*
- **PFA Mats** - One chemically compatible teflon PFA mat is used on top to provide seal, between the rubber mat and vials.

* 96-well blocks also use a bottom rubber mat - see note inside

Sealing the Plate - Screwing Down Cover

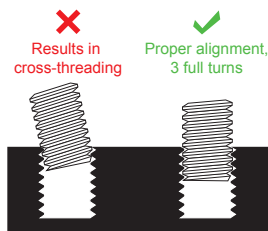
Sealing the plate properly is critical to reaction success

– Procedure for screwing down the plates - even pressure, not too tight, keeping top cover flat

1. Insert screws and hand tighten each screw 3 complete turns.

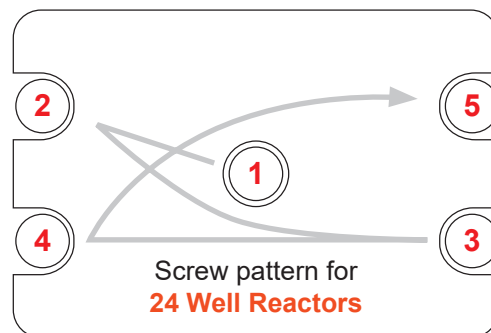
Note: DO NOT FORCE screw into hole.
 The screw should twist into the hole in the block with ease. If the screw starts to bind, back the screw out, realign and try again.

Important: before proceeding, make sure all screws are properly threaded and fastened. Check by pulling up on each screw to make sure they won't pull out. If screw comes out of hole, repeat step 1.

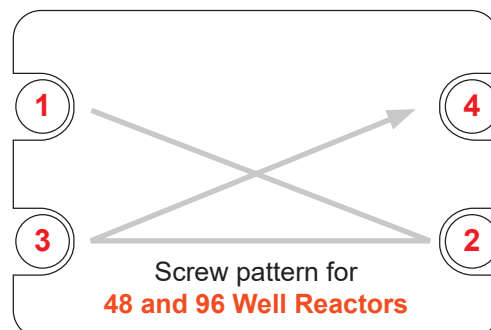


2. Level cover plate: Following the pattern shown at right, screw down each screw so that they are flush (but not tight) with cover plate. Go around at least twice.

3. Tighten screws: Once the screws are flush and the cover plate is level and secure, tighten the screws using the same cross-pattern using a 5/32" (or 4mm) allen key. Proceed with at least two rounds of tightening. **DO NOT OVERTIGHTEN.** Repeat.



For 24 well reactors, the ideal torque value is 18 in•lbs. Start with the center bolt first, then go top left, bottom right, bottom left, top right. Go around at least twice until you get to 18 in•lb. **Be sure to never tighten 1 bolt fully before engaging the others.**



For 48 well reactors, the ideal torque values are 20 in•lbs. For 96 well (including LIGHTWEIGHT), ideal torque values are 18 in•lbs. Start at the top left, then go bottom right, bottom left, top right. Go around at least twice. First time around try to go 10 in•lbs, then the 2nd time around you can go to 20 (for 48) or 18 (for the 96) in•lbs. **Again, never tighten 1 bolt fully before engaging the others.**

Note: Gen II 96-well reactors have a bottom mat which does not have to be replaced often. Should you decide to replace it, instructions can be found on our website.