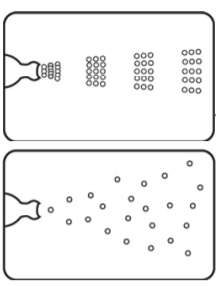


Microbubbles exiting from circulation pump nozzles

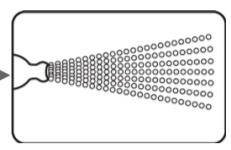
IMPORTANT: A low level of microbubbles in marine aquariums is normal and should be expected. Intense skimming is the secret of great water quality, as it both removes organic waste before it can break down AND maintains a high redox level. This is achieved by super-saturating the water with air, i.e. dissolving more gas into the water than is normal for the given temperature and pressure. Once the super-saturated water leaves the skimmer, it "relaxes" and releases the extra gas in the form of microbubbles.



Q. What kind of bubbles are you getting?

SPORADIC BURSTS / FREE-FLOATING DUST PARTICLES

CONTINUOUS STREAM



SITUATION NORMAL
There is nothing to do
see explanation above

- Remove all non-RS media
- Wait 1 day for tank to settle

Q. Have you installed any non-Red Sea approved media to your MAX?

YES

NO

Establish if problem is skimmer related
TURN OFF SKIMMER + WAIT 10 MINS

BUBBLES PERSIST
Not skimmer related

BUBBLES STOP
Skimmer related

See NEXT PAGE >>>

Check that the WATERLINE reaches the underside of the inner top rim of the tank

Waterline low

Waterline OK

Raise waterline to correct level

Q. Is your inlet shutter fully open (i.e pushed down to the end)?

NO

YES

Open shutter fully (i.e push it down to the end)

Q. Has the carbon been replaced or removed from, and then returned to, the water for a short period of time?

YES

NO

Leave carbon in MAX for another 3 days, bubbles will dissipate naturally

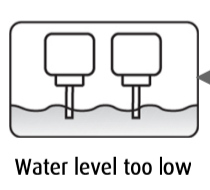
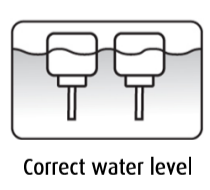
INFO
- All new carbon releases air bubbles for first 3 days
- All carbon removed from the water (even for a few minutes) absorbs air and releases it as bubbles when returned to the tank.

Check your circulation pumps:
- Disconnect & reconnect
- Make sure nozzles are attached firmly, pumps don't jiggle about

INFO: Any small opening (in the pump or nozzles seals) allows air to enter and effectively functions as a venturi

BUBBLES PERSIST

Check water level in pump chamber



LOW

NORMAL

See NEXT PAGE >>>

Might be blockage in mechanical media
REMOVE + RINSE BOTH SPONGE FILTERS

IMPORTANT
The sponge filters are highly effective at trapping both fine & coarse waste particles - they need to be cleaned regularly to avoid blockages:
- clean white filter every 2 days
- clean black filter once a week

BUBBLES PERSIST

- Remove WHITE sponge
- Cut the BLACK sponge down to 10cm / 4" in vertical height

BUBBLES PERSIST

Might be blockage in bio media
REMOVE BIO MEDIA + RINSE THOROUGHLY

EXPLANATION During setup and cycling a higher than normal level of organic waste can build up causing blockages

PERSISTS

See NEXT PAGE >>>

