Establish if problem is skimmer related

**Q. What kind of bubbles are you getting?**

**SITUATION NORMAL**
There is nothing to do
see explanation above

**SPORADIC BURSTS**
FREE-FLOATING
DUST PARTICLES

CONTINUOUS
STREAM

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

**YES**

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

**NO**

**Establish if problem is skimmer related**

**TURN OFF SKIMMER + WAIT 10 MINS**

**Bubbles Persist**
Not skimmer related

**Bubbles Stop**
Skimmer related

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

**Waterline low**

- Raise waterline to correct level

**Waterline OK**

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

**NO**

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

**YES**

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

**NO**

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

**YES**

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

**Bubbles Persist**

**Check water level in pump chamber**

**LOW**

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

**NORMAl**

**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**

**Correct water level**

**Water level too low**

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

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

**INFO**
- Any small opening (on the pump or nozzles seat) allows air to enter and effectively functions as a venturi

**IMPORTANT**
The sponge filters are highly effective at trapping bath 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 stop when you turn off skimmer

Q. Do you have the (good) blue-ring skimmer inle?

NO: bubbles persist

Contact your local Red Sea dealer/distributor

YES: bubbles persist

Check that skimmer pump ring is positioned securely

BUBBLES PERSISTS

Check skimmer glue line for leaks

NO LEAKS

Contact your local Red Sea dealer/distributor

Q. Is your skimmer working properly?

Over-skimming / not skimming at all

Skims normally

Q. Have you recently: added supplements? added conditioners? introduced frozen fish foods? changed over 30% of the water?

NO: BUBBLES PERSIST

Q. What type of salt are you using?

Red Sea Coral Pro

OTHER BRANDS

Q. What type of water are you using?

RO/Di Water

TAP WATER + CONDITIONERS / NATURAL SEA WATER

Q. How mature is your MAX?

MAX not finished cycling / not stocked / less than 4 weeks old

MAX already cycled / stocked / more than 4 weeks old

Contact your local Red Sea dealer/distributor

INFO: Small quantity of MAXs were released Dec 06 / Jan 07 with incorrectly calibrated skimmer inlet (black-ring). Most were subsequently replaced with the good (blue-ring) inlet.

HOW TO CHECK INLET TYPE
1. Open & remove power center from niche
2. Look through the inside wall of the niche for bubbles exiting from the seam between the skimmer inlet ring and pump body, or anywhere else in that region

INFO: The skimmer is manufactured from a front and back section, glued together. In rare cases there might be a gap or opening in the glue line, which causes bubbles to escape the skimmer into the water stream.

HOW TO CHECK GLUE LINE
1. Remove skimmer from tank and dry thoroughly
2. Pour a cup of water inside the skimmer while holding it in horizontal position
3. Run the water over the glue line by rocking skimmer gently from side to side
4. Check for leaks
5. Turn skimmer over and repeat process for the glue line on the other side

INFO: Over-skimming indicates presence of chemical substances that need to be removed by the skimmer. Many water conditioners added to tap water/impurities found in natural sea water increase the surface tension of the water and cause a small proportion of the bubbles to escape skimmer chamber.

INFO: Some synthetic salt formulae contain binding substances such as EDTA that increase surface tension and causes a small proportion of the bubbles to escape skimmer chamber.

SEAWATER: Most seawater today contains traces of pollutants, e.g. Phenols, Carbohydrates, oils, etc, and therefore natural seawater is not usually suitable for use in reef aquaria.

TAP WATER: We strongly recommend NOT to use tap water. If you are going to use it, DO NOT add conditioners/dechlorinators. Allow the water settle for 24 hours before to let the chlorine settle. Never introduce to the MAX.

INFO: Skimmers need organic particles in the aquarium water in order to function properly. When there are no organic particles (new setup, new water, no livestock) the ability of skimmer to retain the bubbles in the chamber is reduced.

WE HIGHLY recommend changing to RS Coral Pro

WE HIGHLY recommend changing to RO/Di water