

AIR PUMP SELECTION:

Correct sizing of the air pump is critical to the performance of your protein skimmer. We recommend using a high quality medium to large air pump. Consult your dealer for sizing suggestions.

SKIMMER TUNING:

The skimmer is adjusted by raising or lowering it in the chamber by sliding the collection cup in the hanger plate.

The correct adjustment will yield a thick, dark liquid. If adjusted too "wet" the liquid will be thin and lightly colored. If adjusted too "dry" a thick layer of semi-solid, dense matter will build up in the body and overflow tube. Your skimmer should percolate like a coffee pot when adjusted properly.

TO CORRECTLY ADJUST A NEW SKIMMER:

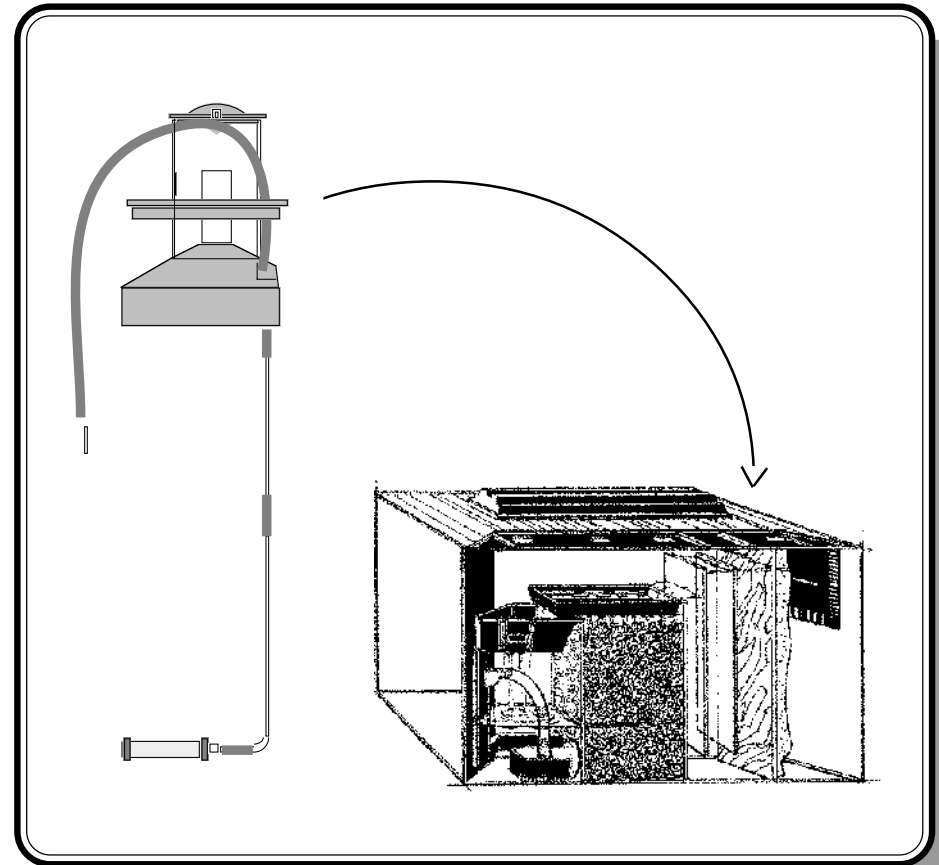
- 1) Start with the skimmer adjusted as high as possible on the hanger plate.
- 2) Attach an air pump with a check valve to the skimmer's air connector hose.
- 3) With air pump running, look (from top) down through small tube to verify that the air is being dispensed in very fine bubbles. The surface of the water in the skimmer should look like it is boiling.
- 4) Before anything can accumulate in the skimmer cup, a layer of slime must build up on the inside surfaces of the skimmer, depending on the pollution in your tank this can take up to two weeks. Do not attempt any further adjustment until foam appears at top of small skimmer tube.
- 5) The correct adjustment will yield a thick, dark liquid. Slowly, over a few hours, lower the skimmer body, a little (approx. 1/4") at a time, until a moderate amount of foam begins to spill over into the collection cup. After enough liquid accumulates to tell what color the liquid is adjust as follows. If the liquid is yellow and light, raise skimmer body 1/4" and repeat. If the liquid is dark and thick, leave adjustment as is and check the next day. Continue tuning in above manner by checking daily and adjusting as the color of liquid indicates. If liquid is light, raise skimmer body. If liquid is too thick lower skimmer body. If skimmer does not perform as described, air pump may be too small or not operating correctly. Replace or clean airstone when bubble size increases visibly. (To clean ceramic airstone, disassemble and heat the white part in microwave oven for 3 minutes on HIGH) Ceramic air stones may only be good for 4-5 cleanings before replacement is required.

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INTEGRATED FILTER SYSTEM PROTEIN SKIMMER

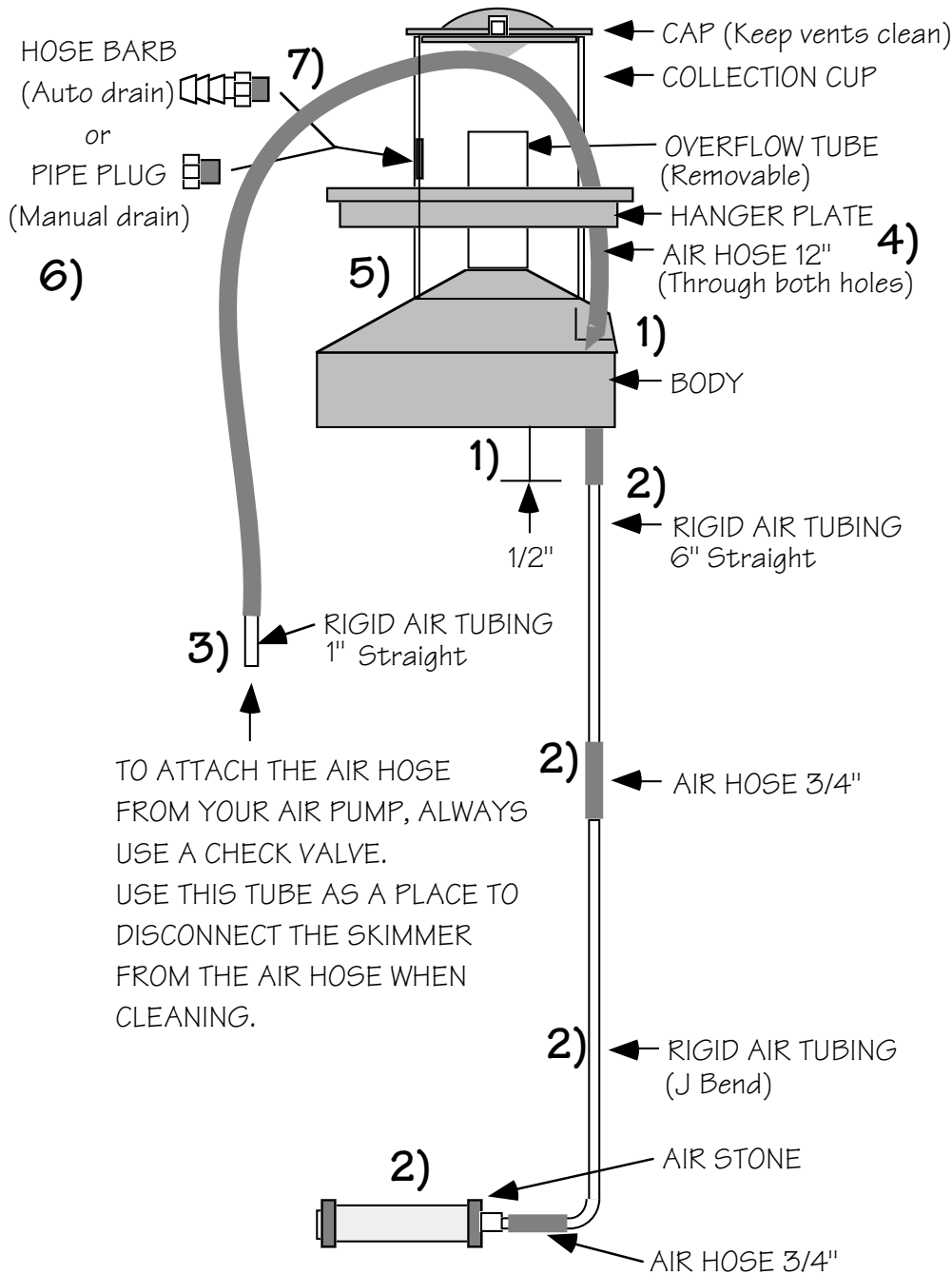
INSTALLATION INSTRUCTIONS



For:



SYSTEM II PROTEIN SKIMMER ASSEMBLY DIAGRAM



ASSEMBLY:

Begin assembly of your System II Protein Skimmer by locating all the parts on the assembly drawing.

- 1) Insert the 12" air hose through the small hole in the body (see drawing). It should fit tight so don't be afraid to force it a little. Pull the airline tubing about a 1/2" past the bottom of the skimmer body.
- 2) Attach the 6" piece of rigid tubing to the airline you just inserted into the skimmer. Attach a 3/4" long piece of air hose, the "J bend" rigid tubing, another 3/4" long air hose, and then the air stone.
- 3) Feed the loose end of the air hose through the small hole in the hanger plate (from bottom as shown in assembly drawing). Install the hanger plate by gently twisting and pushing it on to the collection cup.
- 4) Attach the 1" long piece of rigid tubing to the loose end of the air hose that you connected to the skimmer body. This is the end that connects to your air pump.
- 5) Slide hanger plate to bottom of skimmer cup.
- 6) Screw the hose barb (for auto drain) or the pipe plug (for manual drain) into threaded hole in the collection cup.
- 7) For auto drain, attach a 3/8" hose to the hose barb and run it to a container below the tank.

• Assembly should now look the same as the drawing.

INSTALLATION:

- The skimmer slips down into the System II filter and hangs from the hanger plate. (#2 SIDE VIEW)
- The skimmer fits into the second chamber of the filter as shown in #3 TOP VIEW drawing below.
- The skimmer must be "rocked" into its proper location in the filter, see #1 SIDE VIEW drawing at right.

- 1) Slide the hanger plate up to the threaded fitting.
- 2) Place the AIRSTONE and tube into chamber.
- 3) Tilt skimmer body towards the back of tank and slip body into chamber as shown in the #1 SIDE VIEW drawing at right.
- 4) Tilt skimmer to upright and let it rest on hanger plate as shown in #2 SIDE VIEW drawing at right.
- 5) The skimmer is adjusted by sliding the it up or down in the chamber. This can be done by holding the hanger plate down to the tank with one hand and pulling or pushing on the skimmer cup.
- 6) TO CLEAN without disturbing adjustment, do not move the hanger plate on the skimmer tube.

