

Fig. 2-1

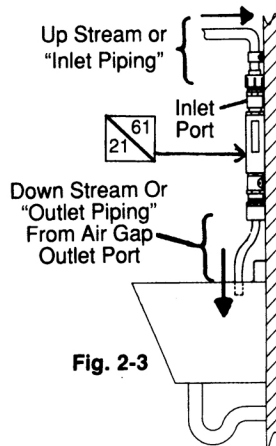


Fig. 2-3

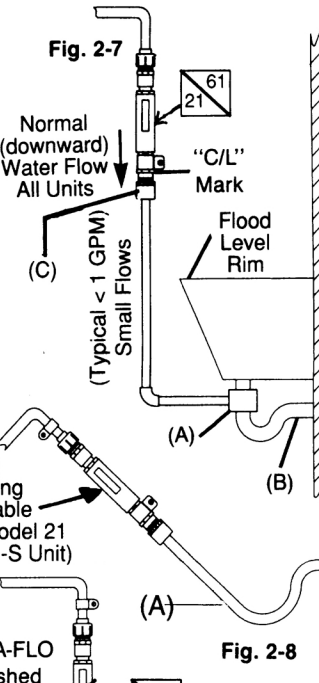


Fig. 2-7

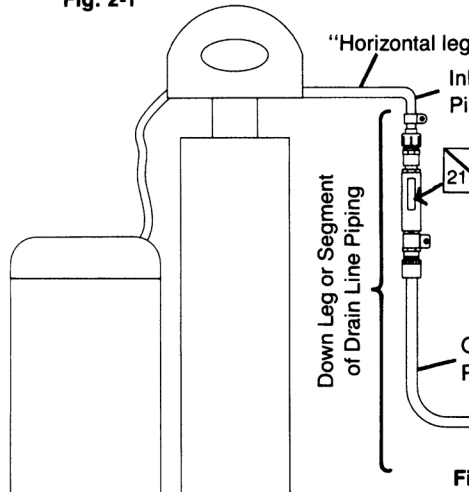


Fig. 2-4

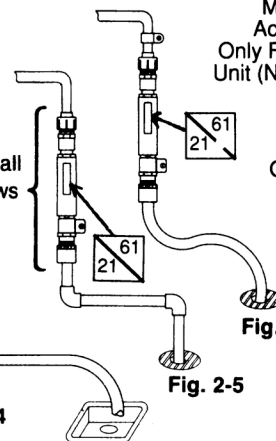


Fig. 2-5

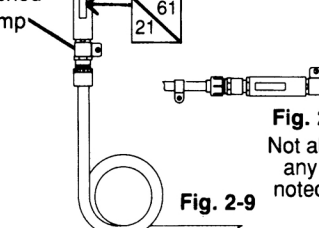


Fig. 2-6

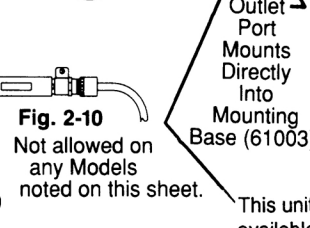


Fig. 2-8



Fig. 2-9



Fig. 2-10

General Installation Instructions and Guidelines

[REFER TO FORM #316100 also FOR model 31, 61 units]

The figures above represent many of the installation situations typically encountered by the water conditioning equipment installer. These figures together with the following explanations are intended primarily to acquaint the first time customer and/or installer with the proper use and installation of these "AIR GAP" units. If you are having problems with our product functioning properly or have other questions, then contact your supplier and/or installer or the factory. Additional technical information is available by ordering "GAP-A-FLO", Installation and Service Manual (P/N 2110113), or other pertinent data.

Do the Following when installing model 21, 31, 61 AIR GAP Units:

1. Read all instruction carefully before starting the installation if you are not familiar with our AIR GAP products.
2. Comply with all local plumbing codes.
3. Properly secure unit as well as the inlet and outlet piping. Be sure to cycle the upstream equipment thoroughly to confirm no system leaks and proper Air Gap unit performance before leaving the installation site.
- (*) 4. When tightening "GAP-A-FLO" threads: use the upper wrench flats to hold the unit while making the inlet connection. Similarly, use the lower wrench flats while making the outlet connection.
5. At all times fluid must be able to flow freely through the Air Gap unit and the attached outlet (downstream) piping. Therefore the outlet piping should be kept as short as possible (generally 2 or 3 feet or less) and as free flowing as possible.
- (*) 6. (For water softeners and filters (large flows) always use the supplied 5/8" O.D. outlet compression fitting — or if you prefer, the 3/4" MIP outlet thread. The 3/8" FIP outlet thread is intended only for very small flows such as from an "RO" unit.)
7. Always install our unit upstream of a trap. These Air Gap units provide only an Air Gap and not a trap.
8. Generally: Outlet pipe size and length is determined by this unit. Inlet pipe size, length and height is determined by the installation site and the water conditioner manufacturer recommendations. (Also see item 7 below.)
- (*) 9. Install Model 21 vertically (Fig. 4) or at 45° (Fig. 8) or at some angle between 45° and vertical - always with the inlet elevated above the outlet port. (All model 31-S, 31-TT and 61-S must be installed vertically).
10. Install all units in the "down leg" of the drain line piping. (Typically Figs. 2 thru 9 or Fig. 1, C above.)
11. If making a direct connection as in Fig. 7, then be sure that the AIR GAP unit is properly mounted and secured. The "C/L" mark must be elevated one inch or more above the maximum possible backflow water flood level.
12. Ref. Figs. 2, 3 — Note in all cases a trap is down stream of our unit. NOTE also in these situations that the outlet piping is short, has no elbows and presents to our unit a rapid decrease in elevation thus providing good/quick drainage through the outlet piping. Generally this represents an ideal situation. (Typical for large flows.)
13. Always use teflon tape on all molded plastic threads and use extra caution so as not to over tighten or damage the threads, particularly female threads. Use care when connecting to barb fitting ports of model 31 and 61-S units.

DON'T do the following when installing model 21, 31, 61 Air Gap units:

1. Never install in the "up leg" (Fig. 1, point A) or "horizontal leg" (Fig. 1, point B or Fig. 10) of the drain line piping.
- (*) 2. Never install such that the inlet port is less than 45° above the outlet port (Fig. 8 depicts 45° mounting).
3. Avoid long horizontal piping in the outlet piping (Fig. 4 or Fig. 5); minimize elbows in outlet piping (Fig. 5); avoid any increases in elevation of outlet piping such as Figs. 6, 8 or 9. (Water flow in outlet piping should not be restricted by severe turns or elevation increases, (2-8) particularly if large flows are involved as from a softener.)
4. Generally, never make a hard connection or direct connection between our unit and the house drain/waste piping. NOTE: no direct connections in Figs. 2, 3, 4, 5, 6, 8. Note that there is a direct connection Fig. 7 at point (A). This is OK for smaller flows (generally less than 1 GPM) as from "RO" units, so long as unit "C/L" (after mounting unit) is above the sink top rim (flood level) and/or above the maximum possible "back flow" water flood level (spill level).
5. Never connect downstream of a trap (Fig. 7, Point B) unless a new trap is provided in the new piping line between the connections at locations (C) and (B).
- (*) 6. Do not use the small flat injector washer (item 7 of #2110113) for water softener or filter installations; only use for small flows such as small "RO" units or systems.
7. Outlet piping should never be smaller than inlet piping and must be installed so as to easily handle the maximum fluid flowing thru the Air Gap unit. When inlet flow stops, the installation should allow unit to drain freely and completely within 5 seconds. Don't install units where they will be subject to freezing or severe weather.